NAVAL AIR TRAINING COMMAND

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CHIEF OF NAVAL AIR TRAINING

PRIMARY 1 AND 2 NAVAL FLIGHT OFFICER TRAINING SYSTEM (NFOTS) CURRICULUM

2015

DEPARTMENT OF THE NAVY
CHIEF OF NAVAL AIR TRAINING
250 LEXINGTON BLVD SUITE 102
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CNATRA INSTRUCTION 1542.162A

Subj: PRIMARY 1 AND 2 NAVAL FLIGHT OFFICER TRAINING SYSTEM (NFOTS) CURRICULUM

1. Purpose. To publish the curriculum for training Naval Flight Officers (NFOs) in the Primary 1 and 2 phases of Naval Air Training Command (NATRACOM) flight training.

2. Cancellation. CNATRAINST 1542.162 will be cancelled when the last student enrolled completes the curriculum.

3. Action. This curriculum is effective on receipt. No changes will be made without written authorization by the Chief of Naval Air Training (CNATRA).

4. Forms. The CNATRA forms required by this instruction are automated in the Training Integration Management System (TIMS) computer program. Additional CNATRA forms are available on the CNATRA website https://www.cnatra.navy.mil/pubs/forms.htm.

D. M. EDGECOMB
Chief of Staff

Distribution:
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SUMMARY OF CHANGES

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COURSE DATA

1. Course Title. Primary 1 and 2 Naval Flight Officer Training System (NFOTS) Curriculum.

2. Course Identification Number (CIN). Primary 1 NFOTS, Q-2D-0162; Primary 2 NFOTS, Q-2D-1162.

3. Location(s). Naval Air Station (NAS) Pensacola.

4. Course Status. Active.

5. Course Mission. Primary 1 and 2 NFOTS is designed to qualify graduates of this course for follow-on advanced flight training and prepare them for their future responsibilities as military officers.

6. Prerequisite Training. Successful completion of Navy Aviation Preflight Indoctrination Training Curriculum, Q-9B-0020.

7. Security Clearance Requirements. None.

8. Follow-on Training. Assigned by the graduate's parent service.

9. Course Length. Overall time-to-train calculated in accordance with CNATRAINST 1550.6E. Training Days account for factors including weather, personnel and equipment availability, briefing and preparation time, and historical delays. Calendar Weeks further account for weekends, holidays, safety standdowns, and other expected nonworking days.

	Training Days	Calendar Weeks
a. Primary 1:	80.0	17.7
b. Primary 2:	16.2	3.6

10. Class Capacity. Variable.

11. Instructor Requirements. As established by Chief of Naval Operations (CNO) planning factors.

12. Course Curriculum Model Manager. Commander, Training Air Wing SIX (COMTRAWING SIX).

13. Quota Management Authority. Chief of Naval Air Training.

14. Quota Control. CNO.

15. Course Training Subjects

a. Primary 1 Ground Training

PRIMARY 1 ADMINISTRATION		
Stage	**Symbol**	**Hours**
Welcome Aboard, various briefs, Paraloft, Orientation, Medical Records Check-In, NFO Training System Brief, and Checkout	G0101-9	14.25
Totals		**14.25**

PRIMARY 1 GROUND TRAINING		
Stage	**Symbol**	**Hours**
Airsickness Management Program	G0201	1.0
T-6A Ejection/Egress Brief and Trainer	G0202	4.0
VFR Communications Procedures	G0203-5	4.5
Crew Resource Management	G0206	2.0
Fleet Operations	G0301-3	5.5
Safety and Policy	G0401-5	5.5
Meteorology	G0501-7	9.5
Meteorology Exam and Remediation/Critique	G0508-9	2.0
Aircraft Systems 1	G0601-14	21.5
Aircraft Systems 1 Exam and Remediation/Critique	G0615-16	2.0
Aircraft Systems 2	G0701-12	14.0
Aircraft Systems 2 Exam and Remediation/ Critique	G0713-14	2.0
Operating Procedures (OPs)/Naval Air Training and Operating Procedures Standardization (NATOPS)	G0801-11 G0813	16.0

PRIMARY 1 GROUND TRAINING (CONT)		
Stage	**Symbol**	**Hours**
EP Test	G0812	1.5
OPs/NATOPS Exam and Remediation/Critique	G0814-15	2.0
Instruments 1	G0901-24	33.0
Instruments 1 Exam and Remediation/Critique	G0925-26	2.5
Instruments 2	G1001-13 G1016-28	42.0
Instruments 2 Exam and Remediation/Critique	G1014-15	3.0
Flight Planning	G1101-39	42.5
Flight Planning Exam	G1140	1.5
Flight Planning Exam Remediation and Critique	G1141	1.5
TP-13 Practical Final Exam	G1142	1.5
Totals		**220.5***

Note: Primary 1 Ground Training totals include 3.0* hours that require a UTD. These hours are also included on the Primary 1 Flight Training table.

b. Primary 1 Flight Support

PRIMARY 1 FLIGHT SUPPORT		
Stage	**Symbol**	**Hours**
Contact Flight Support	C1101-7	14.0
Contact Indoctrination (FAM-0)	C1201	3.0
Instrument Navigation Flight Support	I1101-3	13.0
Visual Navigation Flight Support	N1101-10	39.0
Totals		**69.0***

Note: Primary 1 Flight Support totals include 4.5* hours accomplished as self-study in the UTD. These hours are also included on the Primary 1 Flight Training table.

c. Primary 1 Flight Training. The programmed times for each phase, stage, and media are:

PRIMARY 1 FLIGHT TRAINING						
Flight/Events	**UTD/OFT**		**OFT**		**T-6 Dual**	
	Flts	**Hrs**	**Flts**	**Hrs**	**Flts**	**Hrs**
Cockpit Fam (G06/G07)	2	3.0				
Contact Cockpit Fam Study (SS)	1	1.5*				
Cockpit Procedure Training	3	4.5				
Day Contact					4	6.0
Night Contact					1	1.5
Day Contact Check Ride					1	1.5
INAV Cockpit Fam Study (SS)	1	1.5*				
Instrument Navigation 1	9	13.5			5	10.0
Instrument Navigation 1 Check Ride					1	2.0
VNAV Cockpit Fam Study (SS)	1	1.5*				
Visual Navigation/ Precision Aerobatics			2	3.0	3	6.0
Visual Navigation/ Precision Aerobatics Check Ride					1	2.0
Totals	**17**	**25.5***	**2**	**3.0**	**16**	**29.0**

Note: Totals include 4.5* hours self-study in the UTD without an instructor. Self-study (SS) UTDs will be formally scheduled events.

d. Primary 2 Ground Training

PRIMARY 2 ADMINISTRATION		
Stage	**Symbol**	**Hours**
Primary 2 Checkout	G0110	2.0
Totals		**2.0**

e. Primary 2 Flight Support

PRIMARY 2 FLIGHT SUPPORT		
Stage	**Symbol**	**Hours**
Section Fundamentals Flight Support	F1101-9	19.5
Totals		**19.5***

Note: Primary 2 Flight Support totals include 1.5* hours accomplished as a self-study in the UTD. These hours are also included in the Primary 2 Flight Training table.

f. Primary 2 Flight Training. The programmed times for each phase, stage, and media are:

PRIMARY 2 FLIGHT TRAINING						
Flight/Events	**UTD/OFT**		**OFT**		**T-6 Dual**	
	Flts	**Hrs**	**Flts**	**Hrs**	**Flts**	**Hrs**
Section Fundamentals Cockpit Fam Study (SS)	1	1.5*				
Instrument Navigation 2	2	3.0			4	8.0
Section Fundamentals			1	1.5	2	3.0
Totals	**3**	**4.5***	**1**	**1.5**	**6**	**11.0**

Note: Totals include 1.5* hours self-study in the UTD without an instructor. Self-study UTD will be formally scheduled.

16. Training Preparation Time. In addition to the hours formally planned for classes, simulators, and flights, significant additional time to prepare and study should be expected outside of scheduled training hours. This range will vary depending on the complexity of the material and individual student needs, and may be up to several hours per event. For simulator and flight events, specific brief and taxi times will be programmed into TIMS and accounted for on the flight schedule, per the following table:

ADDITIONAL FORMAL TRAINING TIME PER EVENT			
Training Area	**Brief/ Preflight/ Taxi**	**Taxi/ Debrief**	**Total**
Flight Events: C4101, I4101, N4101, and F4101	2.5	1.5	4.0
Flight Events: All others	2.0	1.5	3.5
Simulator Events: All	0.5	0.5	1.0

17. Physical Requirements. As specified in the Manual of the Medical Department, Chapter 15, and all applicable anthropometric standards.

18. Obligated Service. Refer to MILPERSMAN for Naval personnel.

19. Primary Instructional Methods. Lecture, Mediated Interactive Lecture (MIL), Computer-Assisted Instruction (CAI), 2B47, Unit Training Device (UTD), Operational Flight Trainers (OFT), aircraft, facility tours, self- and group-paced study, and in-flight instruction.

20. Preceding Curriculum Data. Replaces CNATRAINST 1542.162.

21. Student Performance Measurement/Application of Standards. The standards outlined in Chapter IX, Course Training Standards, are used to evaluate student performance for all items on all events. Final judgment regarding the satisfactory performance of any item rests with the instructor. Refer to CNATRAINST 1500.4H, Chapter VI, for further guidance.

ABBREVIATIONS

The following is a list of abbreviations used in the curriculum:

AGL	-	Above Ground Level
AGSM	-	Anti-G Straining Maneuver
AIM	-	Aeronautical Information Manual
AOB	-	Angle of Bank
ASR	-	Airport Surveillance Radar
ATC	-	Air Traffic Control
ATF	-	Aviation Training Form
ATIS	-	Automatic Terminal Information Service
ATJ	-	Aviation Training Jacket
ATS	-	Aviation Training Summary or Approach Turn Stall
AWOS	-	Automated Weather Observing System
BAC	-	Basic Approach Configuration
BAR	-	Basic Airwork Recognition
CA	-	Class Advisor
CAI	-	Computer-Assisted Instruction
CDI	-	Course Deviation Indicator
CFS	-	Canopy Fracturing System
CHUM	-	Chart Updating Manual
CIN	-	Course Identification Number
CNO	-	Chief of Naval Operations
CO	-	Commanding Officer
COMTRAWING SIX	-	Commander Training Air Wing SIX
CRM	-	Crew Resource Management
CTAF	-	Common Traffic Advisory Frequency

CTS	-	Course Training Standard
DA	-	Decision Altitude
DME	-	Distance Measuring Equipment
DOR	-	Drop on Request
DRAFT	-	Destination, Route, Altitude, Fuel, Time
ELP	-	Emergency Landing Pattern
EOB	-	End of Block
EP	-	Emergency Procedure
ET	-	Extra Training
ETA	-	Estimated Time of Arrival
ETE	-	Estimated Time Enroute
FAA	-	Federal Aviation Administration
FAF	-	Final Approach Fix
FAM	-	Familiarization
FAR	-	Federal Aviation Regulations
FIH	-	Flight Information Handbook
FPC	-	Final Progress Check
FSS	-	Flight Service Station
FTI	-	Flight Training Instruction
FWOP	-	Fixed-Wing Operating Procedures
GCA	-	Ground-Controlled Approach
GPS	-	Global Positioning System
GPU	-	Ground Power Unit
H/X	-	Hours per Event
HEFOE	-	Hydraulic, Electrical, Fuel, Oxygen, and Engine
IAF	-	Initial Approach Fix

IAW	-	In Accordance With
ICS	-	Intercommunication System
IFR	-	Instrument Flight Rules
ILS	-	Instrument Landing System
IMS	-	International Military Student
IMSO	-	IMS Officer
IP	-	Instructor Pilot
IPC	-	Initial Progress Check
KIAS	-	Knots Indicated Airspeed
LSC	-	Level Speed Change
MAF	-	Maintenance Action Form
MAP	-	Missed Approach Point
MCF	-	Mission Completion Fuel
MCS	-	Multicrew Simulator
MDA	-	Minimum Descent Altitude
MIF	-	Maneuver Item File
MIL	-	Mediated Interactive Lecture
MOA	-	Military Operating Area
MTR	-	Military Training Route
NAS	-	Naval Air Station
NATOPS	-	Naval Air Training and Operating Procedures Standardization
NAVAID	-	Navigational Aid
NFO	-	Naval Flight Officer
NFOTS	-	NFO Training System
NFS	-	Naval Flight Student
NG	-	No Grade

NIFS	-	NFO Introductory Flight Screening
NM	-	Nautical Miles
NMU	-	Number of Marginals and UNSATs
NORDO	-	No Radio
NOTAMs	-	Notices to Airmen
NSS	-	Naval Standard Score
OBOGS	-	On-Board Oxygen Generating System
OFT	-	Operational Flight Trainer
OLF	-	Outlying Field
OLQ	-	Officer-Like Qualities
OPSO	-	Operations Officer
PA	-	Precision Aerobatics
PAR	-	Precision Approach Radar
PAS	-	Phase Aggregate Score
PAT	-	Power, Attitude, Trim
PCL	-	Pocket Checklist
PEL	-	Precautionary Emergency Landing
PMSV	-	Pilot-to-Metro Service
PMU	-	Power Management Unit
POS	-	Power Off Stall
PPEL	-	Practice Precautionary Emergency Landing
PTP	-	Point-to-Point
RA	-	Radar Approach
RMU	-	Radio Management Unit
RRU	-	Ready Room UNSAT
SA	-	Situational Awareness

SMS	-	Student Monitoring Status
SNFO	-	Student NFO
SOP	-	Standard Operating Procedure
SSR	-	Special Syllabus Requirement
STAR	-	Standard Terminal Arrival Route
SUA	-	Special Use Airspace
TAD	-	Trim Aid Device
TCN	-	Terminal Change Notice
TOT	-	Time-On-Target
TP	-	Trainer Practical
TPC	-	Tactical Pilotage Chart
TRB	-	Training Review Board
UHF	-	Ultra High Frequency
UNSAT	-	Unsatisfactory
UTD	-	Unit Training Device
VDP	-	Visual Descent Point
VFR	-	Visual Flight Rules
VHF	-	Very High Frequency
VMC	-	Visual Meteorological Conditions
VNAV	-	Visual Navigation
VOR	-	VHF Omnidirectional Range
XO	-	Executive Officer

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GLOSSARY

1. Advancing X. Completed event within the normal syllabus flow. Excludes events with last characters in the range 84-89.

2. Aviation Training Form. A grade sheet documenting student performance for all categories of training regardless of media, phase, or stage.

3. Aviation Training Jacket. The ATJ is the student's training record. It contains ATFs, calendar card, grade reports, and all other associated training information. It is filed in student control and follows the student through all phases of training.

4. Block of Training. A sequential series of lessons within a training stage sharing identical MIFs. The third character in the lesson designator identifies a block.

5. Blue ATF. A standard ATF that is printed on blue paper. The blue ATF is used to denote a Marginal event.

6. Check Ride (SXX90). A flight check in any stage of training.

7. Class Advisor. An instructor pilot (IP) assigned to provide counseling and guidance to a specific class throughout the applicable syllabus.

8. Contact. The stage of training that combines day flight familiarization, aerobatic maneuvers, and out-of-control flight procedures as well as an introduction to the night environment.

9. Course of Training. The entire program of preflight, flight, simulation, academics, and officer development conducted in all media during the programmed training days.

10. Course Training Standard (CTS). A description of required behaviors and standards of performance for a specific maneuver. These standards are in Chapter IX.

11. Courseware. The technical data, FTIs, audio, video, film, CAI, instructor guides, student study guides, and other training material developed to support and implement the syllabus of instruction.

12. Critical Item. Any maneuver coded with a plus sign (+). This symbol indicates the maneuver is required and must be accomplished to the specified standard in that block of training.

13. Deliverables. A CNATRA 1542/1827 TRB Summary Form generated by the TRB that summarizes a specific student's progress in a given syllabus and provides detailed information on the application of NFO training for that student. Deliverables indicate whether the quality and continuity of training provided was IAW CNATRAINST 1542.162A.

14. Drop on Request. A student’s voluntary option to request termination of training IAW CNATRAINST 1500.4H.

15. Emergency Procedure. Any degradation of aircraft systems or flight conditions requiring pilot action or intervention.

16. End of Block. Last event in block. The student must meet or exceed MIF on all critical items and all optional items attempted in the block to progress past EOB.

17. Extra Training (SXX87). Additional student training flights ordered by the OPSO or higher in order to compensate for training deficiencies.

18. Final Progress Check (SXX89). A special check normally given by the Commanding Officer or Executive Officer. The CO may delegate FPC duty to a qualified O-4 or above in the event that neither the CO nor XO are qualified or available to instruct in the required stage. A satisfactory FPC returns the student to normal syllabus flow. An UNSAT FPC results in a TRB.

19. Fixed-Wing Operating Procedures Manual. A training wing directive describing standard operating procedures for local fixed-wing aircraft.

20. Flight Training Instruction. A CNATRA-approved manual describing flight procedures and techniques for each training stage.

21. Hours per X. The average length for each event in a block, rounded to the nearest tenth of an hour.

22. Initial Progress Check (SXX88). A special check given by the OPSO or his representative as designated in writing by the CO. A satisfactory IPC returns the student to normal syllabus flow. An UNSAT IPC results in an FPC.

23. Lesson Designator. All syllabus events have a five-character lesson designator in the following format:

Char	**Meaning**	**Remarks**		
1st	Stage	G—Ground C—Contact	I—Instrument N—Visual Navigation/PA	F—Section Fundamentals
2nd	Media	0—Ground Event 1—Academics	2—CPT 3—Simulator	4—Aircraft
3rd	Block	Sequential, indicating block within stage.		
4th & 5th	Event/ Check Identifier	Sequential, indicating event within block, or other event types as shown below: 84—Adaptation Flight 85—Practice Sim 86—Warmup 87—Extra Training	88—Initial Progress Check 89—Final Progress Check 90—Check Ride	

24. Maneuver Item File (MIF). A listing of required maneuvers and associated proficiency levels for each block of training.

25. Master Syllabus. Chapters I-VIII list all training syllabus activities, prerequisites, and desired training flow for NFOTS.

26. Off-Wing Flight. A Contact flight not flown with the student's on-wing.

27. On-Wing. The student's assigned instructor in the contact stage IAW CNATRAINST 1500.4H.

28. Outcomes. Potential courses of action following a Progress Check. There are only two basic outcomes:

a. Pass - Return to training.

b. Fail - Proceed with the attrition process/attrite.

29. Phase of Training. A major division in the course of training. The NFOTS syllabus consists of Primary (Primary 1 and 2), Intermediate, and Advanced (Strike Fighter and Maritime Command and Control) phases of training.

30. Pink ATF. A standard ATF that is printed on pink paper. The pink ATF is used to denote an UNSAT event generating a progress check.

31. Progress Check Pilot. An instructor pilot authorized to administer Initial or Final Progress Checks.

32. Ready Room UNSAT (RRU). An UNSAT grade given for inadequate knowledge of flight procedures, systems, discuss items, emergency procedures, or deficient preflight planning.

33. Special Syllabus Requirement. One-time, ungraded demonstration item(s).

34. Stage of Training. All training of a particular type (Ground, Contact, Instrument Navigation 1, Visual Navigation/Precision Aerobatics, Instrument Navigation 2, Section Fundamentals) within a phase. The first letter in the lesson designator identifies the stage of each lesson (Example: F4101 is in the Section Fundamentals stage).

35. Standard Operating Procedure. A training wing or squadron directive describing SOPs for local aircraft.

36. Student Monitoring Status. SMS is a squadron-initiated status to address substandard student performance.

37. Training Media. NFOTS media include aircraft, UTDs, OFTs, ground training, and CAIs. The second character in the lesson identifier designates the training media.

38. Training Review Board. A fact-finding board appointed to conduct an administrative review of circumstances and procedures relative to an FPC recommendation for a student's attrition.

39. Training Time Out. Cessation of any training evolution initiated when a student or instructor expresses concern for personal safety or a condition warrants clarification of procedures or requirements IAW CNATRAINST 1500.4H.

40. Warmup Event(s) (SXX86). Additional events given to allow a student to regain a level of proficiency previously demonstrated which has diminished due to an extended break in training.

41. Yellow ATF. A standard ATF that is printed on yellow paper. The yellow ATF is used to denote an UNSAT event that does not generate a progress check.

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Chapter I

General Instructions

1. Syllabus Management

a. Distribution. Participating squadron personnel.

b. Interpretation. The syllabus is directive. Should circumstances create situations not covered within the scope of this syllabus, or specific course of action appears to conflict with other directives, consult CNATRA (N71).

c. Deviations. Document all deviations on the event's ATF.

d. Changes. Recommended changes shall be submitted IAW CNATRAINST 1550.6E.

e. Execution. All students execute Primary 1 events. Students selected for carrier aviation execute Primary 2 events.

f. Syllabus Description. Primary 1 and Primary 2 NFOTS are flown in the Primary training platform and divided into stages. Stages are grouped by like flight training regimes such as Contact and Instrument Navigation 1. Each stage is subdivided into training blocks. The training blocks consist of a specified number of flights. MIFs identify the minimum acceptable level of performance in relation to the CTS that must be achieved at the completion of each training block.

g. Grade Calculation

(1) Phase Aggregate Score. An SNFO's PAS is a comparative ranking based on the previous population of completers for a specific phase of aviation training. PAS indicates only SNFO performance relative to a normative population of other recent SNFOs. Under the NFOTS, PAS is not by itself an indication of whether an SNFO has met the criteria necessary for winging or continuation in aviation training. PAS is calculated for each block within a curriculum and for the entire phase.

(2) NFOTS SNFO Calculations. From a population of previous SNFOs, an SNFO's PAS is calculated using equation (1), below:

$$SNFO\_PAS = 50 + 10 * \left(0.81 * \frac{S - M1}{S1} + 0.1 * \frac{M2 - NMU}{S2} + 0.09 * \frac{Acad - M3}{S3} \right) \quad (1)$$

Where

SNFO_PAS – SNFO Score
NMU – SNFO NMU
Acad – SNFO Academic Grades
M1 – Squadron Average Score
M2 – Squadron Average NMU
M3 – Squadron Average Academic Grades
S1 – Standard Deviation of Squadron Score
S2 – Standard Deviation of Squadron NMU
S3 – Standard Deviation of Squadron Academic Grades

(3) Naval Standard Score (NSS). NSS is calculated to correct for potential non-normality in the distribution of PAS. NSS is calculated for each block within a curriculum and for the entire phase. NSS is calculated from PAS by using equation (2), below:

$$NSS = 50 + 10 * \left(\frac{PAS - MPAS}{SDPAS} \right) \quad (2)$$

Where

PAS – SNFO PAS
MPAS – Squadron Average PAS
SDPAS – Standard Deviation of Squadron PAS

h. Accelerated Students. Students with prior flight time, excluding Introductory Flight Screening (IFS) or IFS equivalent, shall be considered accelerated. During the accelerated period, the student may progress to the next block of training once MIF is met within the current block of training. Squadron commanding officers have the authority to tailor the student's accelerated syllabus based on the student's past flying experience. ATFs for the events not flown will be completed with a note in the remarks section stating "ACCELERATED – EVENT NOT FLOWN. ATF COMPLETED FOR ADMINISTRATIVE PURPOSES ONLY IAW CNATRAINST 1542.162A."

2. Training Management

a. Syllabus Progression. Fly syllabus events within each stage sequentially. Do not start a block without all prerequisites. Students must complete all events. System training management is designed to facilitate two graded events (flight, simulator, or exam) per student per day.

b. Maneuver Continuity. Students must accomplish previously graded procedures frequently enough to ensure required proficiency is maintained.

c. Hours per Event. Instructors shall plan and execute missions to meet H/X as closely as practical. If actual event length varies from H/X by more than 0.3 hrs (greater or less than), the instructor shall annotate reason(s) in the ATF's general comments section.

d. Location of Training. Student events may be accomplished at home station or on cross-country/detachments where applicable.

e. Special Syllabus Requirements. SSRs may be allocated to blocks. Unless noted otherwise, instructors may accomplish SSRs on any flight within the block. The SSRs shall be completed in the specified block. Annotate completed SSRs in the following three places on the ATF: Specify the SSR completed in the Comments section, assign NG/1 as the SSR maneuver grade, and date/save SSR exposure on the TIMS SSR tab.

f. Aviation Training Jacket (ATJ) Reviews. The Class Advisor (CA) or other qualified flight instructor shall conduct jacket reviews at least weekly. Additionally, SMS students require weekly ATJ reviews from the Student Control Officer.

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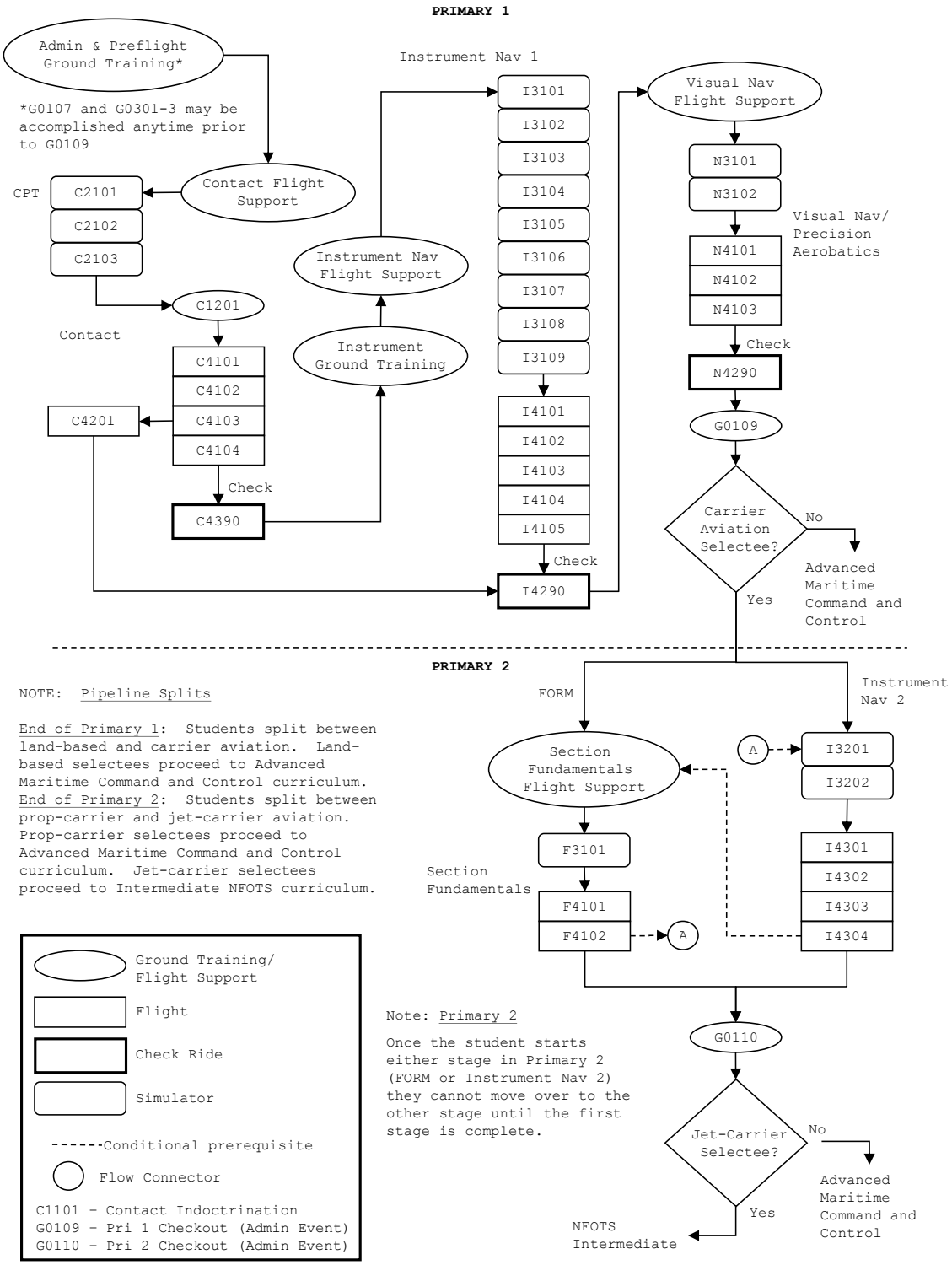


NOTE: Pipeline Splits

End of Primary 1: Students split between land-based and carrier aviation. Land-based selectees proceed to Advanced Maritime Command and Control curriculum.
End of Primary 2: Students split between prop-carrier and jet-carrier aviation. Prop-carrier selectees proceed to Advanced Maritime Command and Control curriculum. Jet-carrier selectees proceed to Intermediate NFOTS curriculum.

Note: Primary 2

Once the student starts either stage in Primary 2 (FORM or Instrument Nav 2) they cannot move over to the other stage until the first stage is complete.

3. Unsatisfactory (UNSAT) Performance. (See also ***Progress Check Procedures,*** Chapter I, paragraph 10c(3).)

a. Flight/Simulator

(1) If syllabus events remain in the block, the student shall progress to the next syllabus event, until the second consecutive UNSAT or third cumulative UNSAT in the block.

(2) If no syllabus events remain, repeat the last syllabus event in the block until the student meets EOB MIF, or until the second consecutive UNSAT or third cumulative UNSAT in the block.

(3) If the SNFO receives an UNSAT that does not result in an IPC/FPC, the ATF shall be printed on yellow paper.

(4) An UNSAT check flight (SXX90), two consecutive UNSATs in block, three cumulative UNSATs (in the same block), four total UNSATs in phase, or RRU result in a Progress Check. Document the failed check flight or second consecutive/third (in block) cumulative UNSAT on a pink ATF for that syllabus event.

b. Ready Room UNSAT (RRU). An RRU is defined as either of the following:

(1) An SNFO is inadequately prepared for the scheduled event. The RRU shall be documented on a pink version of the event's ATF. The event will be marked as incomplete with a U/2 grade in the maneuver column(s) that triggered the RRU. Upon completion of the progress check, the event shall be flown to completion and general knowledge and emergency procedures shall be incorporated into the overall grading solution.

(2) The SNFO fails a nonacademic examination (e.g., NATOPS quiz).

(3) For purposes of determining when IPCs or FPCs are required, RRUs and UNSAT flight/simulator events all contribute to the same IPC/FPC process; each SNFO may only have one IPC per phase of training.

c. Academic. Two academic examination failures in a phase trigger an FPC. The FPC shall be completed prior to retake.

d. Remediation. A simulator or ground evaluation emphasizing the deficient areas may clear an UNSAT check ride or EOB syllabus event caused solely by ground operations.

e. Restrictions. Until remediating the UNSAT:

(1) The student shall not accomplish training in any other stage.

(2) The student may accomplish academic classes, examinations, and ground training events, provided the UNSAT event was not a prerequisite.

4. Training Review Board. The TRAWING shall conduct a TRB on all NFSs recommended for attrition.

a. The TRB shall consider the quality of training provided, continuity of training provided, outside influences, and extenuating circumstances.

b. The TRB shall not make recommendations based on perceived NFS potential or aspects unrelated to the administrative application of the NFS's training.

c. For more information, refer to CNATRAINST 1500.4H.

5. Instructor Continuity

a. Students shall fly Contact syllabus events C4101-C4103 with their on-wing. Exceptions:

(1) The CO, XO, or a member of the operations department may substitute as on-wing in the event the student's on-wing is not available and an on-wing change is not prudent.

(2) Substitute on-wings shall be in the student's direct chain of command.

b. There are no other continuity requirements unless specified by the operations department for SMS students.

6. Break in Training Warmup Events (SXX86)

a. Nonsyllabus warmup events compensate for breaks in training. Eligibility is based on the number of days since the last flight or simulator in the same stage. All warmups shall be dual (flight) or instructional (simulator) and coded as an SXX86 (e.g., I4386).

(1) Warmup grades do not satisfy block or MIF requirements and shall not be included in the cumulative totals.

(2) Night Contact (C4201) warmup criteria shall be applied based on the last instructional flight event in either the Contact or Instrument stage.

b. Warmups Between Stages. Warmup events shall not be given prior to the first event in stage unless more than 30 days have elapsed since any syllabus event has been conducted (refer to CNATRAINST 1500.4H for warmup event guidelines).

c. Warmup Flights for Extended Breaks in Training. For administration of warmup events for breaks in training of more than 30 days, the CO shall determine an appropriate warmup plan per CNATRAINST 1500.4H.

d. Warmup Event Criteria. Refer to the chart below for awarding WU events in stage.

e. Optional Warmup Event Criteria. Optional warmup criteria are defined in CNATRAINST 1500.4H. Optional warmup events are based on the student's performance. If the student is in the optional warmup window and their performance meets MIF or is sufficient to meet MIF by the end of block, the event shall count as the next syllabus event. If the student's performance is Marginal or UNSAT, the event will be ***graded as such and*** coded as a warmup.

CRITERIA FOR AWARDING WARMUP EVENTS IN STAGE		
Break* (Days)	**Warmup Events**	**Remarks**
7-13 Sim to A/C	1 Mandatory Simulator	• Mandatory WU is not an advancing event. • WU event may be flown in aircraft with the TRAWING Commander's approval.
7-13 All others	1 Optional	• Optional WU is based on performance and is required if overall grade is Marginal or UNSAT. • WU is prohibited if performance meets MIF or is sufficient to meet MIF by EOB.
14-30 Sim to A/C	2 Mandatory Simulators	• Mandatory WUs are not advancing events. • For blocks with a single simulator event, only one mandatory WU event is required.
14-30 All others	1 Mandatory 1 Optional	• Mandatory WU is not an advancing event. • Optional WU based on performance and is required if overall grade is Marginal or UNSAT. • WU is prohibited if performance meets MIF or is sufficient to meet MIF by EOB.

*Break = (Current Julian Date) – (Julian Date of last simulator or flight event in stage).

7. Additional Flights/Simulators

a. Extra Training (ET) Events (SXX87). All ETs shall be coded as SXX87, e.g., I4187. ET events include, but are not limited to, IPC/FPC ET events. Award these events to compensate for training deficiencies, e.g., poor event/maneuver continuity or improper instruction.

(1) The CO may authorize one ET prior to an IPC and up to two ETs prior to an FPC.

(2) Authorization for IPC and FPC ET events shall be documented on a Supplementary ATF and shall clearly state the training deficiency that warrants the ET(s).

(3) IPC/FPC 87 events ***shall not*** be awarded to remediate UNSAT student performance unrelated to unit/instructional training deficiencies.

b. Adaptation Events (SXX84). The Squadron CO may provide events for adaptation to the flying environment when requested in writing by the flight surgeon, e.g., airsickness, eyeglasses, etc. These events shall be coded as SXX84 events.

8. Student Monitoring Status (SMS)

a. The objective of SMS is to focus supervisory attention to a student's progress in training, address performance deficiencies, and assess the student's potential to complete the program. SMS may also be applied to students who require supervisory attention while trying to resolve personal issues. The intent of SMS is to focus on struggling students to help them overcome their difficulties, and provide an expedited route to attrition if this focused attention is unsuccessful.

b. A student who receives two UNSATs in a block of training or three UNSATs within a phase of training shall be placed on SMS.

c. The squadron CO is not constrained to the UNSAT-related SMS trigger; a CO may place a student on SMS anytime that the CO perceives a need for focused attention to resolve student difficulties.

d. SMS is intended as a short-term program to address specific performance deficiencies within a block or stage of training. SMS requires that specific goals be met by student within a specific time period. Specific performance goals shall be related to training standards rather than relative performance against a student's peers. The time period may reference syllabus events.

e. An SMS training plan should include, but is not limited to, training tailored to correct specific deficiencies or to address personal issues.

f. A student's Class Advisor shall document placement on and removal from SMS in the student's ATJ via a Supplementary ATF. All SMS-related documentation shall be completed on blue paper. Documentation placing a student on SMS shall include:

(1) The reason the student is being placed on SMS,

(2) The specific goals to be met for successful removal from SMS,

(3) The period of time the student is to be on SMS in order to achieve the specific goals,

(4) Consequences for not meeting the goals (student shall proceed to FPC),

(5) Specific additional training or extra instruction (if any),

(6) Specific scheduling restrictions (if any), and

(7) Any other applicable requirements or restrictions.

g. Documentation for unsuccessful removal from SMS shall include the specific goal(s) not achieved. For SMS that is triggered by a syllabus event, file the initiating blue SMS Supplementary ATF on the right side of the ATJ, directly above said event's grade sheet. Upon successful completion of SMS, file the closeout blue SMS Supplementary ATF on the right side of the ATJ, and directly above the closeout-event grade sheet. If SMS is not related to a syllabus event (i.e., personal issues, academic failure, etc.), then file the initiating and closeout blue SMS Supplementary ATFs on the left side of the ATJ, below the DOR and TTO policy statements.

h. If a student achieves their SMS goals within the SMS period, or when personal issues have been resolved, then the student is returned to the normal syllabus flow. If the student is unable to meet the specific goals of SMS, or performance does not improve, the student shall be referred to a Command-Directed FPC.

9. Ground Training and Briefing Requirements

a. Mission Preparation, Briefings, and Debriefings

(1) EOB Events. The instructor shall carefully review the student's previous ATFs in planning the EOB event to ensure the profile includes opportunities to reach MIF on all critical items and optional items attempted in the block.

(2) Preparation. Students shall arrive for each flight and simulator with:

(a) A thorough knowledge of:

1. The Discuss Items, as listed in Chapters III-VIII.

2. Procedural knowledge of the critical and optional items for the event's training block.

(b) A flight profile tailored to training requirements, weak areas, and continuity.

(c) The latest ATF for the stage.

(3) Briefing. The instructor shall review the SNFO's previous block ATFs before each event. Thoroughly cover the current mission's:

(a) Discuss Items, as listed in Chapters III-VIII.

(b) Specific objectives.

(c) Techniques and required procedures for accomplishing those objectives.

(d) Planned profile and contingencies.

(4) Debriefing

(a) After each event, the instructor shall critique the student's performance using cause/effect analysis, particularly with respect to the CTS.

(b) The mission's complexity and student's progress will govern the time required for debrief.

(c) Debriefing must be detailed and comprehensive. The ATF shall be completed prior to the SNFO's next event. Exceptions may be made for out-and-ins and cross-country flights. In such instances, the SNFO will be provided feedback on performance as soon as possible following the event.

b. Emergency Procedures (EP) Briefing and Training

(1) EP training builds the student's confidence in the aircraft. The instructor shall conduct EP training on all aircraft events, either on the ground or in the aircraft. Correct procedural deficiencies through additional instruction and study assignments.

(2) Incorporate EP training into trainer events when practical; however, instructional block objectives take precedence.

(3) Grade the student's overall EP knowledge and performance under EPs.

10. Mission Grading Procedures and Evaluation Policies

a. General Grading and Evaluation Policy. MIFs listed are minimum block completion standards per maneuver. Students who consistently perform at the absolute minimum standard through multiple blocks of training may not possess the skills required to complete follow-on training. MIF is designed to allow for minimum performance in a specific area, with the understanding that performance in other areas above the minimum MIF, will offset the weak area.

b. Grading Procedures (Aircraft and Training Devices)

(1) Absolute Maneuver Grading. Use the following grading scale to document the student's characteristic performance on maneuvers attempted during each event. This is an absolute grading scale. Judge the student's proficiency only against the item's CTS. Maneuver grades shall be consistent with the ATF comments.

(a) Demonstrated (NG/1 Level). Enter "No Grade (NG)":

1. When the instructor demonstrates the maneuver and the student does not subsequently perform it during the event.

2. To indicate accomplishing all SSRs for that block or event. Also specify completed SSRs in the ATF's maneuver item content line and document date of exposure via the SSR button on the ATF menu bar.

(b) Unable (U/2 Level). Performance is unsafe or lacks sufficient knowledge, skill, or ability. Deviations greatly exceed CTS, significantly disrupting performance. Corrections significantly lag deviations or aggravate the deviation.

(c) Fair (F/3 Level). Performance is safe, but with limited proficiency. Deviations exceed CTS, detracting from performance. Corrections noticeably lag deviations, and may not be appropriate.

(d) Good (G/4 Level). Characteristic performance is within CTS. Deviations outside CTS are allowed, provided they are brief, minor, and do not affect safety of flight. Corrections must be appropriate and timely.

(e) Excellent (E/5 Level). Greatly surpasses CTS. Performance is correct, efficient, and skillful. Deviations are very minor. The student initiates corrections, if required, and they are appropriate, smooth, and rapid.

(2) Overall Event Grades. Overall event grades represent the student's progression through the syllabus. Grade events "Pass," "Marginal," or "UNSAT." Use the following definitions to characterize event grades. See ***Awarding Overall Event Grades*** for specific rules defining UNSAT performance.

(a) Pass

1. Prior to EOB. Progress is adequate to meet standards by EOB.

2. EOB. The student's performance meets or exceeds standards.

(b) Marginal. Ability to meet the standards by the EOB is questionable. The ATF shall be printed on blue paper. Instructors shall not award a Marginal on an EOB event, check ride, IPC, or FPC. If performance is Marginal on an optional WU, the instructor shall ensure the event is re-coded as a WU (SXX86) prior to ATF completion.

(c) UNSAT. Student exhibits dangerous tendencies or progress toward meeting EOB standards is insufficient. UNSAT overall is at the instructor's discretion, unless it is triggered by regression rules. It should be noted that an event may be graded UNSAT without any individual maneuvers graded 2/Unable. If the student receives an UNSAT that does not result in an IPC or FPC, the ATF shall be printed on yellow paper. UNSAT Progress Checks and UNSAT events that result in a Progress Check shall be printed on pink paper.

(3) Awarding Overall Event Grades. The student's overall grade is based on the student's performance against the MIF. The following rules govern overall event grading.

(a) EOB MIF Performance. Performance must meet MIF by EOB. If the student has previously met MIF in the block, he or she must still meet MIF in the EOB flight if the maneuver is reattempted.

(b) Prior to EOB. Performance must meet/exceed previous block MIF. Example:

1. I31XX MIF requires an F/3 for Arcing. I41XX MIF requires a G/4.

2. The student must meet or exceed F/3 to progress out of I31XX.

3. The student must maintain or exceed F/3 until the last I41XX event, by which time the student must attain G/4.

(c) MIF Performance Maintenance. Students shall maintain or exceed MIF performance from one block to the next within stage or between media within stage, except as noted below or when MIF on a subsequent block is below the preceding block MIF.

(4) Regression Rules. Regression addresses uneven progress through training. Regression rules do not apply to the first simulator or flight block in each stage. The following specifies allowable regression:

(a) The student is allowed up to two maneuver grades of F/3 where a G/4 is required on previous block MIF, and the instructor is satisfied the student is ready to progress to the next event.

(b) The instructor shall award an overall UNSAT due to regression rules if:

1. Regression was to a U/2 where F/3 or G/4 was required on previous block MIF, or

2. Performance on the same maneuver for two consecutive events resulted in an F/3 where a G/4 was required on previous block MIF, or

3. There was regression on more than two items during one event.

(5) Maneuver Requirements. For each block:

(a) Critical (Mandatory) Items. Items with a number and a plus(+) are mandatory and the student must meet the required proficiency by EOB. When a maneuver is performed multiple times in a block of training, the last grade assigned for the maneuver will determine if the student meets EOB MIF.

(b) Optional Items. Items with a number, but without a plus (+), are optional; however, if flown, the student must meet the required proficiency by EOB see paragraph 10.c.(2)(a) for check-ride exceptions).

(c) Not Demonstrated/Not Performed. The instructor will not demonstrate, nor will the student perform:

1. Unnumbered items.

2. Items not in the stage.

3. Exceptions:

a. Weather-driven instrument approaches.

b. Prebriefed maneuvers for instructor proficiency.

(6) Incomplete Events. In general, instructors should consider an event complete if the student is able to accomplish a sufficient amount of the planned profile. This rule is particularly true when weather precludes finishing all maneuver items, and the instructor is able to emphasize training where weather permits. Subsequent events in the block, when available, can reverse this emphasis, hence achieving overall training balance. If a student has had ample opportunity to learn a task and subsequently flies a short mission, the mission shall not be marked incomplete solely to provide unwarranted extra training.

(a) Assessment. Assess the event complete if:

1. Seventy-five percent of the event's hours per event (H/X) was used for training, and

2. There are sufficient events remaining in block to allow for completion of all remaining required maneuvers.

3. Otherwise, assess the event incomplete.

(b) Completion Events

1. An event may both complete a previous event and count as an advancing X.

2. For events flown exclusively to clear an incomplete, grades on maneuvers repeated from the incomplete event do not count toward the student's score, except where the grade assigned for the repeated item is lower than the lowest grade previously assigned on that item from all previous attempts at that event.

(c) Simulator Event Completion. Assess a simulator event complete if the student has received the full training period per the curriculum.

c. Policies for Evaluation Flights and Ground Evaluations

(1) Authorized Evaluators. The CO will designate check ride instructors for each stage.

(2) Check Rides (SXX90)

(a) Check Ride Progression. Check rides are single-event training blocks; therefore, all rules regarding progressing out of a block apply, except:

1. Student should fly a representative cross section of optional maneuvers.

2. Up to two optional maneuvers may be graded F/3 where G/4 is required without requiring an overall UNSAT.

3. The student should be able to demonstrate required levels of proficiency without instructor assistance; however, instruction is allowed on check events and students may reattempt maneuvers at the instructor's discretion.

4. The entire event should be devoted to assessing the student's skill attainment, ability, and readiness to progress to the next block of training. All maneuvers indicated with a plus (+) are check ride critical and must be completed to MIF. Regression rules do not apply.

(b) Incomplete Check Event. A check event shall be graded as incomplete when:

1. Any critical (+) item was not flown, or

2. The instructor was unable to sample sufficient examples of a given maneuver to assess the student's overall performance. If the flight profile is incomplete because too much time was dedicated to reattempting maneuvers or additional training, it should be graded UNSAT/Incomplete.

Note: The subsequent flight need only include maneuvers required to complete the check event.

3. Exceptions. The check event is complete and the overall grade is UNSAT if:

a. Any critical (+) item is below MIF, or

b. More than two noncritical items were graded F/3 where G/4 is required, or

c. Any maneuver is graded U/2.

(c) UNSAT Check Ride—Ground Operations. A check ride graded UNSAT solely for ground operations, like all UNSAT check rides, requires a progress check. The OPSO or CO will decide whether to perform the progress check as a ground evaluation, in the simulator, or in the aircraft.

(3) Progress Check Procedures

(a) Progress checks flown in the aircraft or simulator are holistic reviews of a student's proficiency, judgment, situational awareness, and overall ability to complete the mission. The intent of every Progress Check is to determine whether the student has the potential to reach the defined training standards of his/her current phase of training within the designated TTT, while demonstrating the potential to successfully complete Primary, Intermediate, and Advanced training. All progress checks must meet MIF for the most recently completed block of training. Progress checks in the aircraft or simulator should focus on the student's weak areas and will normally be comprised of a representative cross-section of area and pattern maneuvers. All critical items do not need to be accomplished. Failed Progress Checks shall be documented on a pink version of the ATF for the failed event that generated the Progress Check. Refer to CNATRAINST 1500.4H for additional guidance and requirements.

(b) IPC. The following defines when to conduct an IPC, IPC outcomes, and IPC instructors.

1. IPC Triggers:

a. Two consecutive UNSATs in a block.

b. Three cumulative UNSATs in a block, but not including events coded XX84, XX85, XX86, XX87, or graded Marginal.

c. An UNSAT check event (SXX90).

d. A Ready Room UNSAT (RRU).

e. At the discretion of the OPSO or CO when there is doubt regarding the student's potential to successfully complete.

2. IPC outcomes:

a. Pass. Returns the student to normal syllabus flow. This will normally return the student to the event that triggered the IPC.

b. Fail. An UNSAT IPC results in an FPC.

c. Marginal is not a possible outcome of an IPC.

3. IPC instructors. Shall be senior O-3 or above, and shall be designated in writing by the CO. The IPC is the student's first step in the attrition process, and IPCs should only be performed by experienced instructors who carry the CO's confidence that they have a complete understanding of standards-based grading, MNTS, MIF/CTS requirements of the syllabus, and the IPC/FPC process.

(c) FPC. The following defines when to conduct an FPC, FPC outcomes, and FPC instructors.

1. FPC triggers:

a. Failure of an IPC.

b. In any case where a student has undergone an IPC in phase and subsequently meets any of the IPC triggers listed above.

c. Two academic examination failures in a phase.

d. Four cumulative UNSATs in a phase, including academic failures.

e. Failure to meet SMS goals.

f. At the discretion of the CO when there is doubt regarding the student's potential to successfully complete. Refer to CNATRAINST 1500.4H for additional guidance.

2. Outcomes are:

a. Pass. Returns the student to normal syllabus flow. This will normally return the student to the event that triggered the FPC.

b. Fail. An UNSAT FPC results in an attrition recommendation to Commander, Training Air Wing SIX, and a TRB.

c. Marginal is not a possible outcome for an FPC.

3. FPC Instructors. Whenever possible, FPCs should be conducted by the CO or the Executive Officer (XO) in the CO's absence. In the event that neither the CO nor XO are available or qualified to instruct in the required stage, FPC Instructors shall be O-4 or above, and shall be designated in writing by the CO. An FPC conducted in a simulator shall be evaluated and graded by a qualified squadron FPC Instructor. A qualified Contract Simulator Instructor (CSI) shall be assigned to assist.

d. Progress Check Counseling

(1) Prior to an IPC (SXX88). The student's Class Advisor, Student Control Officer, or Operations Officer shall counsel the student on the Progress Check process and document counseling on a Supplemental ATF.

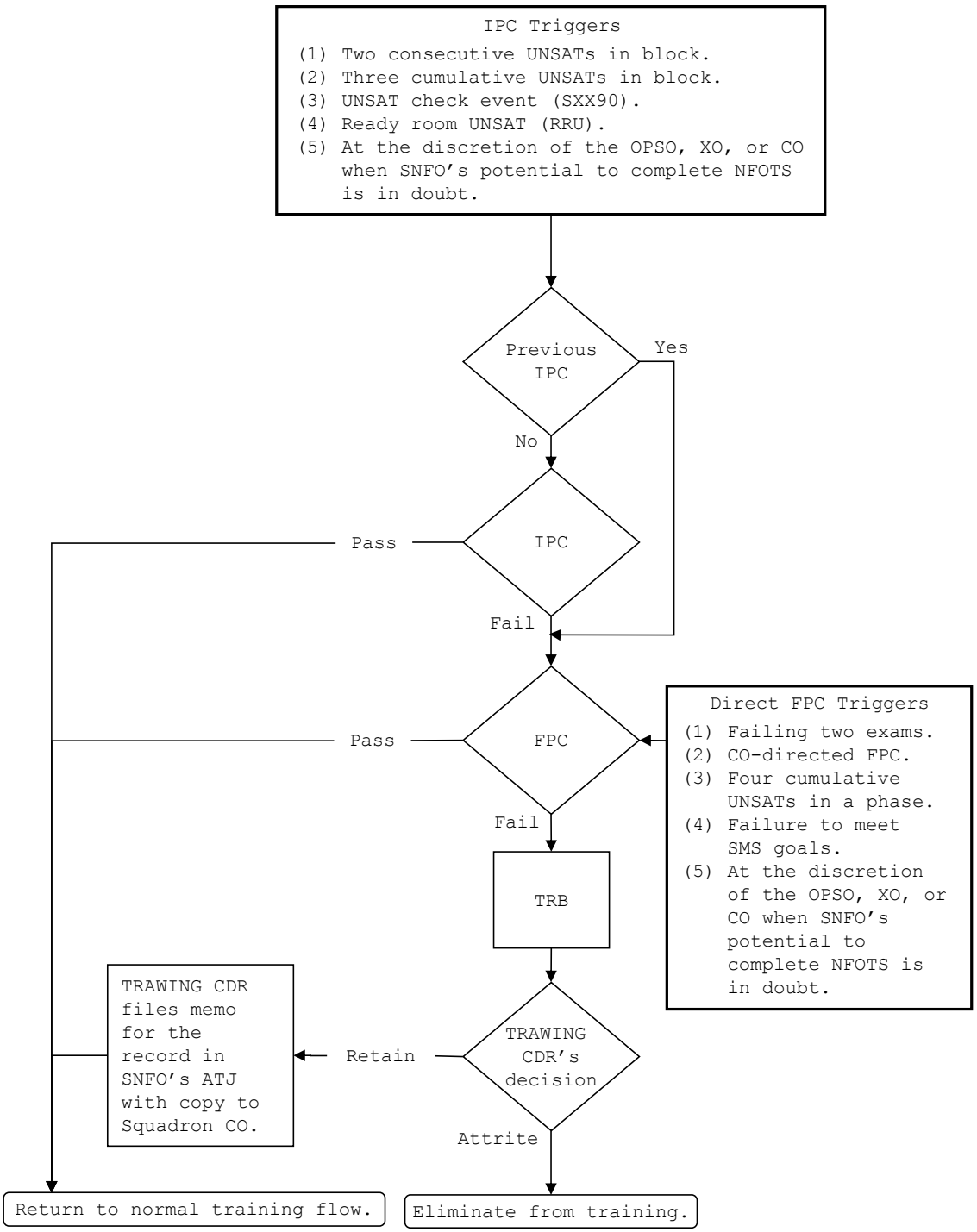
(2) Upon Completion of an IPC. The IPC instructor shall counsel the student on the Progress Check process, his/her retention/attrition recommendations, and future courses of action. The IPC Instructor should also strive to ensure the

student is coping with the Progress Check process appropriately, and notify appropriate squadron leadership immediately if there are any concerns. Post-IPC counseling shall be documented on the IPC ATF.

(3) Prior to an FPC (SXX89). The FPC Instructor shall counsel the student on the Progress Check process. This counseling shall be documented on the FPC ATF.

(4) Upon Completion of an FPC. The CO shall counsel the student. Counseling should consist of the Progress Check process, attrition/retention recommendations, and future courses of action. The CO shall document counseling on the FPC ATF, or on a Supplementary ATF if the CO was not the FPC Instructor.

NFOTS PROGRESS CHECK TRAINING REVIEW PROCESS



11. Special Instructions and Restrictions

a. Flight Hour/Event Requirements and Restrictions

(1) Programmed Hours and Events. Programmed syllabus flight hours are 40.0 hours. Event lengths or SXX86, 87, 88, and 89 events will cause variation. Accomplish all syllabus events.

(2) Minimum Night Hours. N/A.

(3) Minimum Solo Hours. N/A.

(4) Minimum Instrument Hours (Actual or Simulated). N/A.

(5) Maximum Daily Student Activities (Aircraft, Simulator). Students shall not exceed two activities during one duty day or three flights during cross-country flights.

(6) Minimum Student Turn-Times. One hour is required between debriefing of an event and the brief for a follow-on event. This does not apply to out-and-in or cross-country profiles; however, the instructor shall ensure adequate debrief and brief time is allocated.

(7) Crew Day. The period from the beginning of the student's first event or official duty of the day until the completion of the last event of the day, including associated debrief and paperwork. Crew day shall not exceed 12 hours.

(8) Crew Rest. A minimum of 12 hours shall elapse between the conclusion of the student's last scheduled event of the day (including associated debrief) and his or her first scheduled event (including associated brief) of the following day. After six consecutive scheduled days, students shall receive one day off.

b. Maneuver Demonstrations. Maneuver demonstrations will be accomplished as required.

c. Airspace Utilization. Conduct training events in designated areas. These events may be conducted as out-and-ins or cross country flights with OPSO approval.

d. Aircraft/Simulator Interchangeability. Simulator events may not be substituted for flight events. Simulator events may be substituted in the aircraft when the simulator is unavailable for extended periods of time.

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Chapter II

Ground Training

1. Use of Preflight Training Time. Hours are available during the Preflight Stage to schedule briefings, aircraft exterior and interior inspections, learning center programs, study sessions, or any other activities that will enhance the student's training and preparation for Primary 1. If considered more beneficial, these hours may be used for academic training normally conducted early in Primary 1; however, all prerequisites must be met.

Blk #	Media	Title	Events	Hrs	Blk Name
G01	Class	Administration	10	16.25	ADMIN

1. Prerequisites

a. G0101 prior to G0103-8 (any order).

b. G0107, G0301-3, and N4290 prior to G0109 (Primary 1).

c. F4102 and I4304 prior to G0110 (Primary 2).

2. Events

G0101	MIL	Academic Welcome Aboard	0.75
G0102	MIL	Academic Procedures Brief	0.50
G0103	Lect	Commodore's Brief	1.00
G0104	None	Paraloft	2.00
G0105	None	VT-10 Orientation	3.50
G0106	None	Medical Records Check-In	1.50
G0107	Lect	Chaplain's/Ethics Brief	1.00
G0108	MIL	NFOTS Brief	2.00
G0109	None	Primary 1 Checkout	2.00
G0110	None	Primary 2 Checkout	2.00

3. Syllabus Notes

a. After Primary 1 Checkout, E-6, EP-3, P-3, and P-8 Student Selections proceed to Advanced Maritime Command and Control. Remaining students proceed to Primary 2.

b. After Primary 2 Checkout, E-2 Student Selections proceed to Advanced Maritime Command and Control. Remaining students proceed to Intermediate NFOTS.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G02	Class	Preflight Ground Training	6	11.5	See Below

1. Prerequisites

a. G0812 (EP Boldface Procedures Test) prior to G0201-2 (any order).

b. G0815 (Operating Procedures and NATOPS Exam Remediation/Critique) prior to G0203-5 (in order) and G0206.

2. Events

G0201	Lect	Airsickness Management Program	1.0	AEROMED
G0202	Lect	T-6A Ejection/Egress Brief and Trainer	4.0	AEROMED
G0203	CAI	T-6A Introduction to Communications	1.0	VFRCOMM
G0204	Twr Lect	Comm Tower Visit	1.5	VFRCOMM
G0205	CAI	T-6A VFR Communications	2.0	VFRCOMM
G0206	MIL	T-6A Crew Resource Management	2.0	CRM

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G03	Class	Preflight Ground Training – Fleet Operations	3	5.5	FLTOPS

1. Prerequisite. G0102 (Academic Procedures Brief) prior to G0301-3 (any order).

2. Events

G0301	MIL	Fleet Operations and Missions	1.0
G0302	MIL	Introduction to Fleet Command and Control, Operations, and Planning	0.5
G0303	MIL	Fleet Aircraft and Weapons	4.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G04	Class	Preflight Ground Training – Safety and Policy	5	5.5	SAFPOL

1. Prerequisites

a. G0102 (Academic Procedures Brief) prior to G0401-2 (any order) and G0404-5 (any order).

b. G0401-2 prior to G0403.

2. Events

G0401	MIL	Introduction to Safety	1.0
G0402	MIL	Ground Safety ORM	1.0
G0403	Lect	Aviation Safety Program	1.5
G0404	MIL	Navy Flight Policy	1.0
G0405	MIL	Flight Regulations and Policy	1.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G05	Class	Preflight Ground Training – Meteorology	9	11.5	METRO

1. Prerequisite. G0102 (Academic Procedures Brief).

2. Events

G0501	MIL	Introduction to Metro	1.0
G0502	CAI	METARs, PIREPs, and TAFs	1.0
G0503	CAI	Weather Charts	1.5
G0504	CAI	Weather Forecasts and Advisories	1.5
G0505	CAI	DD-175-1	1.5
G0506	MIL	Application of Weather Data	1.0
G0507	MIL	Metro Test Review	2.0
G0508	Test	Metro Exam	1.5
G0509	Lect	Metro Exam Remediation/Critique	0.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G06	Class	Preflight Ground Training – Systems 1	16	23.5	SYS1

1. Prerequisites

a. G0102 (Academic Procedures Brief) prior to G0601-2 (in order).

b. G0602 prior to G0603-4 (any order), G0607-8 (any order), and G0611-13 (any order).

c. G0604 prior to G0605.

d. G0603 and G0605 prior to G0606.

e. G0608 prior to G0609-10 (in order).

f. G0611-13 prior to G0614.

g. G0606, G0610, and G0614 prior to G0615-16 (in order).

2. Events

G0601	MIL	Introduction to T-6 Systems	1.0
G0602	T-6A	T-6A Aircraft Systems Tour	2.0
G0603	CAI	Flight Controls	1.0
G0604	CAI	Hydraulic Systems 1	1.5
G0605	CAI	Hydraulic Systems 2	1.5
G0606	MIL	Flight Controls and Hydraulics Review	2.0
G0607	Lect/ UTD	T-6A Cockpit Familiarization 1	2.0
G0608	CAI	Flight Instruments 1	1.5
G0609	CAI	Flight Instruments 2	1.0

2. Events (cont)

G0610	MIL	Flight Instruments Review	1.5
G0611	CAI	Communication Systems	2.0
G0612	CAI	Navigation Systems	1.5
G0613	CAI	GPS	1.0
G0614	MIL	Communications and Navigation Systems Review	2.0
G0615	Test	Systems 1 Exam	1.5
G0616	Lect	Systems 1 Exam Remediation/Critique	0.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G07	Class	Preflight Ground Training – Systems 2	14	16.0	SYS2

1. Prerequisites

a. G0601 (Introduction to T-6 Systems) prior to G0701-2 (any order), G0704, G0707, G0709, and G0710.

b. G0701-2 prior to G0703.

c. G0704 prior to G0705-6 (in order).

d. G0707 prior to G0708; G0708-10 prior to G0712.

e. G0607 (T-6A Cockpit Familiarization 1) prior to G0711.

f. G0616 (Systems 1 Exam Remediation/Critique), G0703, G0706, and G0712 prior to G0713-14 (in order).

2. Events

G0701	CAI	Electrical System	1.0
G0702	CAI	Fuel System	1.0
G0703	MIL	Electrical and Fuel Review	1.5
G0704	CAI	Propulsion 1	2.0
G0705	CAI	Propulsion 2	1.0
G0706	MIL	Propulsion Review	1.0
G0707	CAI	Environmental System 1	1.0
G0708	CAI	Environmental System 2	0.5
G0709	CAI	Canopy System	0.5
G0710	CAI	Ejection System	1.0
G0711	UTD	T-6A Cockpit Familiarization 2	1.5

2. Events (cont)

G0712	MIL	Environmental, Canopy, and Ejection Review	2.0
G0713	Test	Systems 2 Exam	1.5
G0714	Lect	Systems 2 Exam Remediation/Critique	0.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G08	Class	Preflight Ground Training – Operating Procedures	15	19.5	OPPROC

1. Prerequisites

a. G0714 (Systems 2 Exam Remediation/Critique) prior to G0801; G0801 prior to G0802-11 (any order).

b. G0802-11 prior to G0812-13 (any order); G0812-13 prior to G0814-15 (in order).

2. Events

G0801	MIL	Introduction to Operation Procedures and NATOPS	1.0
G0802	CAI	Exterior Inspection	1.0
G0803	CAI	Preflight Checks	1.5
G0804	CAI	In-Flight Checks	0.5
G0805	CAI	Postflight Checks	0.5
G0806	CAI	Aircraft Operating Limitations	0.5
G0807	MIL	Handling Emergency Procedures	1.0
G0808	MIL	Takeoff Emergencies	1.0
G0809	MIL	In-Flight Emergencies 1	2.5
G0810	MIL	In-Flight Emergencies 2	2.5
G0811	MIL	In-Flight Emergencies 3	3.0
G0812	P/P	EP Boldface Procedures Test	1.5
G0813	Lect	Operating Procedures (OPs) and NATOPS Review	1.0

2. Events (cont)

G0814	P/P Exam	OPs and NATOPS Exam	1.5
G0815	Lect	OPs and NATOPS Exam Remediation/Critique	0.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
C11	Class	Contact Flight Support	7	14.0	CONFP

1. Prerequisites

a. G0815 (OPs and NATOPS Exam Remediation/Critique) prior to C1101-5 in order.

b. G0812 (EP Boldface Procedures Test) prior to C1106.

c. C1105 prior to C1107.

2. Events

C1101	MIL	T-6A Contact 1 - Flight Line Preparation	1.0
C1102	MIL	T-6A Contact 2 - Ground Procedures	2.0
C1103	MIL	T-6A Contact 3 - Course Rules/Area 1/Military Operating Area (MOA)	2.0
C1104	MIL	T-6A Contact 4 – Flight Procedures/Night Flight	1.5
C1105	MIL	T-6A Contact 5 – Landing Pattern/EPs	2.0
C1106	SS/UTD	Contact Cockpit Familiarization Study	1.5
C1107	SS	Contact Event Rehearsal Study	4.0

3. Syllabus Note. C1106 should be accomplished in the UTD without an instructor (formally scheduled event).

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
C12	Class	Contact Indoctrination (FAM-0)	1	3.0	CONTACT

1. Prerequisite. C2103.

2. Events

C1201	Lect	Contact Indoctrination (FAM-0)	3.0

3. Syllabus Notes. The student will accomplish or simulate the following items during C1201.

a. Canopy operation (exterior/interior), before exterior/interior inspections, complete strap-in (all gear), all ground checklists, cockpit familiarization (identify all electronic displays and their function), RMU/backup UHF control head operation, safety pins stowage, emergency ground egress (with and without CFS), and ejection.

b. All students are required to successfully accomplish a boldface and OPS limit exam. Successful accomplishment of the boldface and OPS limit exam consists of 100 percent accuracy. Only minimal abbreviation will be acceptable. Less than 100 percent on the boldface and OPS limit exam shall be annotated on the grade sheet.

4. Discuss Items. Flight line expectations, scheduling/snivels, chain of command, class advisor program, ATF, ATJ, what-to-bring to brief, conduct of preflight briefings, discuss items, weather briefs, weight and balance, flight gear check, aircraft issue, MAF, ground safety, special syllabus requirements, procedures, emergency procedures, information resources, hangar/chair flying, DOR, TTO policy. General discussion of all planned items in paragraph 3 above.

Blk #	Media	Title	Events	Hrs	Blk Name
G09	Class	Instrument Ground Training – Instruments 1	26	35.5	INST1

1. Prerequisites

a. C4390 prior to G0901-4 (any order) and G0906.

b. G0902-4 prior to G0905; G0905 prior to G0908 and G0911.

c. G0906 prior to G0907.

d. G0908 prior to G0909-10 (in order); G0910 prior to G0912.

e. G0912 prior to G0913-23 (in order).

f. G0901, G0907, G0911, and G0923 prior to G0924-26 (in order).

2. Events

G0901	MIL	Introduction and Basic Instruments Overview	1.0
G0902	CAI	Instrument Displays and Cross-check	1.0
G0903	CAI	Introduction to Radio Instruments	2.0
G0904	CAI	FLIP, NOTAMs, and Charts	2.0
G0905	MIL	Basic Instrument Review	3.0
G0906	MIL	Intro to 2B47/TP-1 Brief	0.5
G0907	RIOT	RIOT 1 (Direct, Radial Tracking, Course Intercept)	2.0
G0908	Lect	CR-2, Wind Analysis, and Time Gates	1.5

2. Events (cont)

G0909	Lect/ 2B47	TP-1 Fly (Direct, Radial Tracking, Course Intercept)	2.0
G0910	Lect	TP-1 Debrief/FLIP Homework	0.5
G0911	MIL	Advanced Instruments Overview	0.5
G0912	CAI	Instrument Takeoff and Departures	1.0
G0913	CAI	Arrival Preparation and Holding	0.5
G0914	MIL	Instruments Review 1	2.0
G0915	MIL	Holding Lecture (6Ts)/ Holding Trainer	1.5
G0916	RIOT	RIOT 2 (Direct, Point-to-Point, Arc)	1.5
G0917	Lect/ 2B47	TP-2 Fly (Direct, Point-to-Point, Course Intercept, Arc)	1.5
G0918	Lect	TP-2 Debrief	0.5
G0919	Lect	FLIP Review and CR-2 Exercises	1.5
G0920	RIOT	RIOT 3 (Wind Analysis, GS, ETAs, Holding)	2.0
G0921	Lect	TP-3 Brief	0.5
G0922	Lect/ 2B47	TP-3 Fly (Holding)	2.0
G0923	Lect	TP-3 Debrief/Homework	1.0
G0924	Lect	Instruments 1 Exam Review	1.5
G0925	Test	Instruments 1 Exam	1.5
G0926	Lect	Instruments 1 Exam Remediation/Critique	1.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G10	Class	Instrument Ground Training – Instruments 2	28	45.0	INST2

1. Prerequisites

a. G0926 (Instruments 1 Exam Remediation/Critique) prior to G1001-2 (any order); G1001-2 prior to G1003.

b. G1003 prior to G1004-5 (any order); G1004-5 prior to G1006.

c. G1006 prior to G1007-10 (in order); G1010 prior to G1011-12 (any order).

d. G1011 prior to G1013-15 (in order); G1012 and G1015 prior to G1016.

e. G1016 prior to G1017-25 (in order).

f. G1025 prior to G1026-27 (any order).

g. G1027 prior to G1028.

2. Events

G1001	CAI	Descent and Penetration	0.5
G1002	CAI	Low Altitude Approaches	1.0
G1003	MIL	Instruments Review 2	2.5
G1004	CAI	Final Approach	1.0
G1005	CAI	Radar Approaches	1.5
G1006	CAI	Transition to Landing and Missed Approach	2.5
G1007	MIL	Instruments Review 3	3.0
G1008	Lect	Homework - INAV FTI and Comms	1.5
G1009	MIL	Instruments Review 4	2.5
G1010	Lect	Comm Brief and Radar Pattern	1.0

2. Events (cont)

G1011	Twr Lect	Tower, GCA Visit	2.0
G1012	Lect	TP-4 Brief/RIOT Examples	1.5
G1013	MIL	Instruments 2 Exam Review	1.5
G1014	Test	Instruments 2 Exam	1.5
G1015	Lect	Instruments 2 Exam Remediation/Critique	1.5
G1016	Lect/ 2B47	TP-4 Fly (Departure Procedures, Point-to-Point, Procedure Turn Approach)	2.0
G1017	Lect	TP-4 Debrief	1.0
G1018	Lect	TP-5 Brief/TP-6 Brief	1.5
G1019	Lect/ 2B47	TP-5 Fly (Departure Procedures, Radial Tracking, Arcing Approach, Holding)	2.0
G1020	Lect	TP-5 Debrief	1.5
G1021	Lect/ 2B47	TP-6 Fly (Departure Procedures, Radial Tracking, Point-to-Point, Procedures Turn Approach, Holding)	2.5
G1022	Lect	TP-6 Debrief	1.0
G1023	Lect	TP-7 Brief	1.0
G1024	Lect/ 2B47	TP-7 Fly Practical Final	2.5
G1025	Lect	TP-7 Debrief/Course Critique	1.0
G1026	Lect	INAV Procedures/FTI Brief	1.5
G1027	Lect/ 2B47	TP-7 Remedial Fly	2.0
G1028	Lect	TP-7 Remedial Debrief/FLIP Homework	0.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
G11	Class	Instrument Ground Training – Flight Planning	42	47.0	FLTPLNG

1. Prerequisites

a. G1026 (INAV Procedures/FTI Brief) and G1028 (TP-7 Remedial Debrief/FLIP Homework) prior to G1101-3 (any order) and G1105-6 (any order).

b. G1101 and G1103-6 prior to G1107 and G1113; G1102 prior to G1104.

c. G1107 prior to G1108-11 (in order).

d. G1106 prior to G1112; G1111-12 prior to G1114.

e. G1114 prior to G1115-18 (in order); G1118 prior to G1120-24 (in order).

f. G1112-13 prior to G1119; G1119 prior to G1125.

g. G1124 prior to G1126-30 (in order); G1130 prior to G1132.

h. G1125 prior to G1131; G1132 prior G1133-36 (in order).

i. G1101, G1103-6, and G1112 prior to G1137; G1131 and G1136 prior to G1138.

j. G1136 prior to G1139; G1138 prior to G1140-41 (in order).

k. G1139 prior to G1142.

2. Events

G1101	MIL	Flight Planning Introduction and Overview	0.5
G1102	MIL	Weather Requirements	1.5
G1103	MIL	DD-175	0.5
G1104	MIL	Jet Logs	1.0
G1105	MIL	INAV Turnpoint Procedures	1.0
G1106	MIL	IFR Navigation 1	1.0
G1107	Lect	TP-8 Brief	0.5
G1108	Lect	TP-8 Planning Lab	1.0
G1109	Lect/ 2B47	TP-8 Fly (Turn Point Voice Procedures, EFR Calculations)	2.5
G1110	Lect	TP-8 Debrief	1.0
G1111	Lect	TP-8 DD-175 and Flight Log Critique/Procedures Review	1.0
G1112	Lect	IFR Navigation 2	1.0
G1113	Lect	Day 1 Homework Review	1.0
G1114	Lect	TP-9 Brief	0.5
G1115	Lect	TP-9 Planning Lab	1.0
G1116	Lect/ 2B47	TP-9 Fly (Stopover Flight Plan)	2.5
G1117	Lect	TP-9 Debrief	1.0
G1118	Lect	TP-9 DD-175 and Flight Log Critique/Procedures Review	1.0
G1119	Lect	Day 2 Homework Review	1.0
G1120	Lect	TP-10 Brief	0.5
G1121	Lect	TP-10 Planning Lab	1.0

2. Events (cont)

G1122	Lect/ 2B47	TP-10 Fly (Terminal Area Delay)	2.5
G1123	Lect	TP-10 Debrief	1.0
G1124	Lect	TP-10 DD-175 and Flight Log Critique/Procedures Review	1.0
G1125	Lect	Day 3 Homework Review	1.0
G1126	Lect	TP-11 Brief	0.5
G1127	Lect	TP-11 Planning Lab	1.0
G1128	Lect/ 2B47	TP-11 Fly (Localizer Approach, Terminal Area Delay)	2.5
G1129	Lect	TP-11 Debrief	1.0
G1130	Lect	TP-11 DD-175 and Flight Log Critique/Procedures Review	1.0
G1131	Lect	Day 4 Homework Review	1.0
G1132	Lect	TP-12 Brief	0.5
G1133	Lect	TP-12 Planning Lab	1.0
G1134	Lect/ 2B47	TP-12 Fly (Change in Flight Plan)	2.5
G1135	Lect	TP-12 Debrief	1.0
G1136	Lect	TP-12 DD-175 and Flight Log Critique/Procedures Review	1.0
G1137	MIL	Flight Line Preparation Lecture	0.5
G1138	MIL	Flight Planning Exam Review	1.0
G1139	Lect	TP-13 Practical Exam Brief	0.5
G1140	Test	Flight Planning Exam	1.5

2. Events (cont)

G1141	Lect	Flight Planning Exam Remediation/Critique	1.5
G1142	Lect/ 2B47	TP-13 Practical Final Exam	1.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
I11	Class	Instrument Navigation Flight Support	3	13.0	INAVFP

1. Prerequisites

a. G1137 (Flight Line Preparation Lecture) prior to I1101-3 (any order).

b. G1141 (Flight Planning Exam Remediation/Critique) prior to I1101-3 (any order).

c. G1142 (TP-13 Practical Final Exam) prior to I1101-3 (any order).

2. Events

I1101	MIL	T-6A Instrument Navigation Flight Preparation	5.5
I1102	SS/UTD	Instrument Navigation Cockpit Familiarization Study	1.5
I1103	SS	Instrument Navigation Event Rehearsal Study	6.0

3. Syllabus Note. I1102 should be accomplished in the UTD without an instructor (formally scheduled event).

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
N11	Class/ SS	Visual Navigation Flight Support	10	39.0	VNAVFP

1. Prerequisites

   a. I4290 prior to N1101-5 (any order).

   b. N1101-3 and N1105 prior to N1106-8 (in order).

   c. N1108 prior to N1109-10 (any order).

2. Events

N1101	MIL	Visual Navigation Flight Planning	3.0
N1102	CAI	Automated Flight Planning	3.0
N1103	MIL/Lab	Chart Instruction/Prep	8.0
N1104	SS	Chart Prep Time	8.0
N1105	MIL	Flight Procedures	4.0
N1106	MIL	Visual Navigation Exam Review	2.0
N1107	Test	Visual Navigation Exam	2.0
N1108	Lect	Visual Navigation Exam Remediation/Critique	0.5
N1109	SS/UTD	Visual Navigation Cockpit Familiarization Study	1.5
N1110	SS	Visual Navigation Event Rehearsal Study	7.0

3. Syllabus Note. N1109 should be accomplished in the UTD without an instructor (formally scheduled event).

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
F11	Class	Section Fundamentals Flight Support	9	19.5	SECTFP

1. Prerequisites

a. Completion of Primary 1 and selection for Carrier Aviation.

b. I4304 (Conditional prerequisite - required only if Instrument Nav 2 stage was started first).

2. Events

F1101	CAI	Section Fundamentals Flight Principles	0.5
F1102	CAI	Section Fundamentals Flight Procedures	1.5
F1103	CAI	Section Fundamentals Visual Signals	1.0
F1104	MIL	Section Fundamentals Preparation and Flight Procedures	6.0
F1105	MIL	Section Fundamentals Exam Review	2.5
F1106	Test	Section Fundamentals Exam	1.0
F1107	Lect	Section Fundamentals Exam Remediation/Critique	0.5
F1108	SS/UTD	Section Fundamentals Cockpit Familiarization Study	1.5
F1109	SS	Section Fundamentals Event Rehearsal Study	5.0

3. Syllabus Note. F1108 should be accomplished in the UTD without an instructor (formally scheduled event).

4. Discuss Items. None.

Chapter III

NATOPS Training

This chapter does not apply to the NFOTS Primary 1 and Primary 2 phases of NFO training.

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Chapter IV

Contact Training

1. General. Initial instruction should focus on determining the instructional approach best suited for each student's problem areas so that mission profiles can be flown to correct deficient areas. Although the MIF does not require consistent student proficiency on the more complicated maneuvers until the instructional unit prior to check ride, students must show continued improvement as they progress in training. Regardless of the end-of-unit MIF requirements, overall mission grades must reflect the student's progress toward meeting training requirements.

2. Pattern Training. Utilize the overhead/break traffic pattern as much as possible for pattern training.

3. Navigation. When possible, home and auxiliary field departures and recoveries should be visual with the assistance of the local area map. Weather may require the instructor to use navigational aids in place of visual navigation.

4. Seating. Students shall occupy the front seat for all events in the stage, except the Night Contact event. Students shall occupy the rear seat during C4201, Night Contact.

5. Matrices. The following matrix is an overview of the entire Contact Stage. The purpose of this matrix is to provide the student and IP the easiest way to track progress, regression, and overall status in relation to the MIF. In addition, there is a single matrix following each block description throughout this chapter.

6. Stage MIF

Simulator/Device Event
Check Ride Event
CTS REF "N" = NATOPS

CONTACT STAGE MANEUVER ITEM FILE					
CTS REF	**MANEUVER**	**C2103**	**C4104**	**C4201**	**C4390**
1	General Knowledge/Procedures	3+	4+	4+	4+
2	Emergency Procedures		4+	4+	4+
3	Headwork/Situational Awareness		3+	3+	3+
4	BAR		4+	3+	4+
N	Strap-In/Interior Inspection	3+			
8	Ground Procedures		4+	2+	4+
9	Radio Procedures	3+	3+	3+	3+
N	Engine Start	3+			
N	Start Malfunctions	3+			
N	Fire Warning on the Ground	3+			
N	Emergency Ground Egress	3+			
N	Before Taxi/Taxi Checklists	3+			
N	Overspeed Governor Check	3+			
N	Before Takeoff/Lineup Checks	3+			
N	Takeoff Abort	3+			
N	Emergency Engine Shutdown (Ground)	3+			
10	Takeoff		4+	1	4+
11	Departure		4+	2	4+
N	After Takeoff/Climb Checklists	3+			
N	Operations Check	3+			
12	In-Flight Checks		4+	4+	4+

MIF continued on next page.

CONTACT STAGE MANEUVER ITEM FILE					
CTS REF	**MANEUVER**	**C2103**	**C4104**	**C4201**	**C4390**
13	Use of Controls/Trim		3+	2+	3+
14	Basic Transitions		4+	2	4+
15	Visual Scan/Lookout Doctrine		4+	3	4+
17	In-Flight Planning/Area Orientation		4+	2	4+
18	Level Speed Change		4+	2	4
19	Turn Pattern		4+	2	4
20	Power-Off Stall		4+		4
21	Approach Turn Stall		4+		4+
22	Spin		3+		
23	Simulated Power Loss		3+		3+
24	PPEL		3+	2	3
N	Descent/Before Landing Checklists	3+			
25	Landing Pattern		4+	2	4+
26	Landings		2+	2	2+
27	Go Around/Waveoff		3+	2	3+
N	After Landing/Engine Shutdown Checklists	3+			
N	Uncommanded Propeller Feather	3+			
N	Engine Failure During Flight	3+			
N	Compressor Stalls	3+			
N	PMU Failure	3			
N	Fire Warning in Flight	3+			
N	Generator/Battery Bus Failure	3			
N	Low Fuel Pressure	3+			
N	OBOGS Inoperative	3			
N	Smoke or Fume Elimination	3+			

MIF continued on next page.

CONTACT STAGE MANEUVER ITEM FILE					
CTS REF	**MANEUVER**	**C2103**	**C4104**	**C4201**	**C4390**
N	Oil System Malfunctions	3+			
N	Use of Canopy Fracturing System	3+			
28	Course Rules		4+	2	4
N	Hydraulic Malfunctions	3			
N	Trim System/TAD Failure	3			
N	Canopy Unlocked	3			
N	Ejection	3+			
N	Inadvertent Departure From Controlled Flight	3+			
N	Landing Gear Emergency Extension	3+			
N	Emergency Landing Pattern	3+			
N	Precautionary Emergency Landing	3+			
	Special Syllabus Requirements		1		1

Blk #	Media	Title	Events	Hrs	H/X
C21	UTD/OFT	Cockpit Procedure Training	3	4.5	1.5

1. Prerequisites

a. G0103-6 and G0108 (Administration).

b. G0201 (Airsickness Management Program) and G0202 (T-6A Ejection/Egress Brief and Trainer).

c. G0205 (T-6A VFR Communications).

d. G0206 (T-6A Crew Resource Management).

e. G0403 (Aviation Safety Program), G0404 (Navy Flight Policy), and G0405 (Flight Regulations and Policy).

f. G0509 (Metro Exam Remediation/Critique).

g. G0709 (Canopy System), G0710 (Ejection System), and G0711 (T-6A Cockpit Familiarization 2).

h. C1106 and C1107 (Contact SS).

2. Syllabus Notes

a. C2101. Demonstrate simulator console operation (per local instructions).

b. The student will perform the following procedures on the indicated event.

C2101
Cockpit familiarization – includes complete strap-in; rudder pedal and seat adjustments; location of cockpit displays, switches, and engine controls; standby instruments; interior inspection; start checklist (include one GPU start); start malfunctions/abort start procedure; before taxi/taxi checklists; overspeed governor check; before takeoff checklist; lineup check; after takeoff checklist; operations check; climb checklist; descent checklist; before landing checklist; after landing checklist; engine shutdown checklist; radio procedures; OBOGS inoperative; and inadvertent departure from controlled flight.

C2102
All normal operating procedures, radio procedures, fire warning on the ground, emergency engine shutdown (ground), emergency ground egress/use of canopy fracturing system, aborted takeoff, fire warning in flight, generator/battery bus failure, low fuel pressure, oil system malfunctions, ELP, and PEL.

C2103
All normal operating procedures, radio procedures, uncommanded propeller feather, engine failure during flight, compressor stall, smoke or fume elimination, hydraulic malfunctions, canopy unlocked, ejection, emergency landing gear extension, and ELP (with PEL).

3. Special Syllabus Requirements. None.

4. Discuss Items

C2101
Simulator curriculum, student responsibilities for future simulator events, ATFs/grading procedures, conduct of event, strapping in, all normal checklists, and communication procedures.

C2102
ELP, CFS, all BOLDFACE emergency procedures, and general discussion of all planned items from paragraph 2b/C2102.

C2103
Ejection and the ejection decision, PMU, generator/battery bus inoperative, flight line expectations, and general discussion of all planned items from paragraph 2b/C2103.

5. Block MIF

CTS REF	MANEUVER	C2103
1	General Knowledge/Procedures	3+
N	Strap-In/Interior Inspection	3+
9	Radio Procedures	3+
N	Engine Start	3+
N	Start Malfunctions	3+
N	Fire Warning on the Ground	3+
N	Emergency Ground Egress	3+
N	Before Taxi/Taxi Checklists	3+
N	Overspeed Governor Check	3+
N	Before Takeoff/Lineup Checks	3+
N	Takeoff Abort	3+
N	Emergency Engine Shutdown (Ground)	3+
N	After Takeoff/Climb Checklists	3+
N	Operations Check	3+
N	Descent/Before Landing Checklists	3+
N	After Landing/Engine Shutdown Checklists	3+
N	Uncommanded Propeller Feather	3+
N	Engine Failure During Flight	3+
N	Compressor Stalls	3+
N	PMU Failure	3
N	Fire Warning in Flight	3+
N	Generator/Battery Bus Failure	3
N	Low Fuel Pressure	3+
N	OBOGS Inoperative	3
N	Smoke or Fume Elimination	3+
N	Oil System Malfunctions	3+
N	Use of Canopy Fracturing System	3+

MIF continued on next page.

CTS REF	MANEUVER	C2103
N	Hydraulic Malfunctions	3
N	Trim System/TAD Failure	3
N	Canopy Unlocked	3
N	Ejection	3+
N	Inadvertent Departure From Controlled Flight	3+
N	Landing Gear Emergency Extension	3+
N	Emergency Landing Pattern	3+
N	Precautionary Emergency Landing	3+

Blk #	Media	Title	Events	Hrs	H/X
C41	T-6A	Day Contact	4	6.0	1.5

1. Prerequisite. C1201 (Contact Indoctrination (FAM-0)).

2. Syllabus Notes. The purpose of this block is to motivate the student for the T-6A phase of training and provide exposure to the T-6A flight line training environment and operations. Emphasis should be placed on preflight briefings and procedural recall/execution.

3. Special Syllabus Requirements

C4101
Anti-G straining maneuver.

C4102, C4103, or C4104
Tower-controlled field operations and no flap, takeoff flap, and landing flap landings.

4. Discuss Items

C4101
NATOPS operating limitations, NATOPS ground emergencies, CFS, takeoff procedures, basic transitions, turn pattern, LSC, ATS, POS, trim, landing gear emergency extension, RMU/backup UHF control head operation, ejection, MOA, CRM, and any EP, any limitation.

C4102
Tower-controlled field operations, spins, OLF break entry, OLF operations, Navy landing pattern, hydraulic system and malfunctions, engine failure immediately after takeoff (suitable landing area available), uncommanded prop feather, canopy unlocked, any EP, and any limitation.

C4103
PEL and ELP, engine failure during flight, immediate airstart (PMU norm), fire warning in flight, rapid decompression, any EP, and any limitation.

C4104
Fuel system failures, OBOGS inoperative, inadvertent departure from controlled flight, review contact maneuver procedures, any EP, and any limitation.

5. Block MIF

CTS REF	MANEUVER	C4104
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
10	Takeoff	4+
11	Departure	4+
12	In-Flight Checks	4+
13	Use of Controls/Trim	3+
14	Basic Transitions	4+
15	Visual Scan/Lookout Doctrine	4+
17	In-Flight Planning/Area Orientation	4+
18	Level Speed Change	4+
19	Turn Pattern	4+
20	Power-Off Stall	4+
21	Approach Turn Stall	4+
22	Spin	3+
23	Simulated Power Loss	3+
24	PPEL	3+
25	Landing Pattern	4+
26	Landings	2+
27	Go Around/Waveoff	3+
28	Course Rules	4+
	Special Syllabus Requirements	1

Blk #	Media	Title	Events	Hrs	H/X
C42	T-6A	Night Contact	1	1.5	1.5

1. Prerequisite. C4103.

2. Syllabus Note. Initial takeoff should be no earlier than 30 minutes after official sunset.

3. Special Syllabus Requirements. None.

4. Discuss Items. Airport lighting, night ground operations, night hand signals, T-6A interior and exterior lighting, tower Aldis lamp signals, night vision, battery and generator failure.

5. Block MIF

CTS REF	MANEUVER	C4201
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	3+
8	Ground Procedures	2+
9	Radio Procedures	3+
10	Takeoff	1
11	Departure	2
12	In-Flight Checks	4+
13	Use of Controls/Trim	2+
14	Basic Transitions	2
15	Visual Scan/Lookout Doctrine	3
17	In-Flight Planning/Area Orientation	2
18	Level Speed Change	2
19	Turn Pattern	2
24	PPEL	2
25	Landing Pattern	2
26	Landings	2
27	Go Around/Waveoff	2
28	Course Rules	2

Blk #	Media	Title	Events	Hrs	H/X
C43	T-6A	Day Contact Check Ride	1	1.5	1.5

1. Prerequisite. C4104.

2. Syllabus Notes. Aerobatics will be a demonstration item only. SNFO will be responsible for briefing the maneuver set-up parameters.

3. Special Syllabus Requirements. Precision aerobatics/AGSM.

4. Discuss Items. Precision aerobatics, any previously discussed items, any EP, and any limitation.

5. Block MIF

CTS REF	MANEUVER	C4390
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
10	Takeoff	4+
11	Departure	4+
12	In-Flight Checks	4+
13	Use of Controls/Trim	3+
14	Basic Transitions	4+
15	Visual Scan/Lookout Doctrine	4+
17	In-Flight Planning/Area Orientation	4+
18	Level Speed Change	4
19	Turn Pattern	4
20	Power-Off Stall	4
21	Approach Turn Stall	4+
23	Simulated Power Loss	3+
24	PPEL	3
25	Landing Pattern	4+
26	Landings	2+
27	Go Around/Waveoff	3+
28	Course Rules	4
	Special Syllabus Requirement	1

Chapter V

Instrument Training

1. Seating. Students shall occupy the rear cockpit during this stage.

2. Matrices. The following matrices provide an overview of the Primary 1 and 2 Instrument Navigation Stages. The purpose of these matrices is to provide the student and IP the easiest way to track progress, regression, and overall status in relation to the MIF. In addition, there is a single matrix following each block description throughout this chapter.

3. Instrument Navigation 1 Stage MIF

Simulator/Device Event
Check Ride Event

INSTRUMENT NAVIGATION 1 STAGE MANEUVER ITEM FILE				
CTS REF	**MANEUVER**	**I3109**	**I4105**	**I4290**
1	General Knowledge/Procedures	4+	4+	4+
2	Emergency Procedures	4+	4+	4+
3	Headwork/Situational Awareness	3+	3+	3+
4	BAR	4+	4+	4+
5	Brief/Debrief	3+	3+	3+
6	Mission Planning	3+	3+	3+
7	NFO Responsibilities	4+	4+	4+
8	Ground Procedures	4+	4+	4+
9	Radio Procedures	3+	3+	3+
11	Departure	4+	4+	4+
12	In-Flight Checks	4+	4+	4+
30	Use of ATIS/PMSV/FSS	3+	3+	3+
31	In-Flight Computations	4+	4+	4+

MIF continued on next page.

INSTRUMENT NAVIGATION 1 STAGE MANEUVER ITEM FILE				
CTS REF	**MANEUVER**	**I3109**	**I4105**	**I4290**
32	CRM/Crew Coordination	3+	3+	3+
33	In-Flight Briefings	4+	4+	4+
34	Enroute Procedures	4+	4+	4+
35	Point-to-Point	3+	3+	3+
36	Arcing	3+	4+	4
37	Holding (VOR)	3+	3+	3
38	Holding (GPS)	3+	3+	3
39	VOR Approach	3+	3+	3
40	GPS Approach	3+	3+	3
41	Localizer Approach	3+	3	3
42	ILS Approach	3+	3+	3
43	Circling Approach	3	3+	3
44	RA/GCA	3+	3+	3
45	Missed Approach	3+	3+	3+
46	Instrument Turnpoint Procedures	3+	3+	3+
	Special Syllabus Requirements		1	

4. Instrument Navigation 2 Stage MIF

Simulator/Device Event

INSTRUMENT NAVIGATION 2 STAGE MANEUVER ITEM FILE			
CTS REF	**MANEUVER**	**I3202**	**I4304**
1	General Knowledge/Procedures	4+	4+
2	Emergency Procedures	4+	4+
3	Headwork/Situational Awareness	3+	4+

MIF continued on next page.

INSTRUMENT NAVIGATION 2 STAGE MANEUVER ITEM FILE			
CTS REF	**MANEUVER**	**I3202**	**I4304**
4	BAR	4+	4+
5	Brief/Debrief	4+	4+
6	Mission Planning	4+	4+
7	NFO Responsibilities	4+	4+
8	Ground Procedures	4+	4+
9	Radio Procedures	4+	4+
11	Departure	4+	4+
12	In-Flight Checks	4+	4+
30	Use of ATIS/PMSV/FSS	4+	4+
31	In-Flight Computations	4+	4+
32	CRM/Crew Coordination	3+	4+
33	In-Flight Briefings	4+	4+
34	Enroute Procedures	4+	4+
35	Point-to-Point	3+	4+
36	Arcing	4	4
37	Holding (VOR)	4	4
38	Holding (GPS)	3+	4+
39	VOR Approach	4	4
40	GPS Approach	3+	4+
41	Localizer Approach	4	4+
42	ILS Approach	3+	4+
43	Circling Approach	4	4
44	RA/GCA	4+	4+
45	Missed Approach	4+	4+
46	Instrument Turnpoint Procedures	4+	4+

Blk #	Media	Title	Events	Hrs	H/X
I31	UTD/OFT	Instrument Navigation 1	9	13.5	1.5

1. Prerequisite. I1101-3 (Instrument Navigation Flight Support).

2. Syllabus Notes

a. Introduce and practice instrument navigation enroute procedures and instrument approach procedures.

b. Students shall prepare and have available a DD-175 and flight log for each event.

c. Once the student has met MIF on critical items, introduce real-world situations.

3. Special Syllabus Requirements. None.

4. Discuss Items

I3101
NFO responsibilities, crew coordination, direct to a VOR, DRAFT procedures, radar approaches, and missed approach/climbout procedures.

I3102
Approach plates, VOR/DME holding, arcing, VOR approach, instrument scan, and instrument checklist.

I3103
Radar vectors to final, ILS approach, localizer approach, timing adjustments from FAF to MAP, and any EP.

I3104
VOR holding, full procedure turn approach, and intercept techniques.

I3105
Loading GPS flight plan, GPS approach, and any EP.

I3106
Standard instrument departure, high-altitude airways structure, pilot's discretion descent, VOR approach procedures, and lost communications.

I3107
Non-radar environment communications procedures, ILS approach procedures, and emergency divert.

I3108
Localizer approach procedures, radar approach procedures, localizer back course approach, and any EP.

I3109
Loading GPS flight plan, GPS approach procedures, STARs, and unusual attitudes/vertigo.

5. Block MIF

CTS REF	MANEUVER	I3109
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	3+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+

MIF continued on next page.

CTS REF	MANEUVER	I3109
34	Enroute Procedures	4+
35	Point-to-Point	3+
36	Arcing	3+
37	Holding (VOR)	3+
38	Holding (GPS)	3+
39	VOR Approach	3+
40	GPS Approach	3+
41	Localizer Approach	3+
42	ILS Approach	3+
43	Circling Approach	3
44	RA/GCA	3+
45	Missed Approach	3+
46	Instrument Turnpoint Procedures	3+

Blk #	Media	Title	Events	Hrs	H/X
I41	T-6A	Instrument Navigation 1	5	10.0	2.0

1. Prerequisite. I3109.

2. Syllabus Notes

a. Flights should be flown as local events, but may be flown as out-and-in or cross-country events based on squadron requirements.

b. Students shall prepare and have available a DD-175 and flight log for both primary and alternate routes on each event.

c. Students should plan to fly a minimum of two instrument approaches per flight.

d. Night Contact flight (C4201) shall be accomplished prior to any night instrument flights (I41XX).

3. Special Syllabus Requirements

I4101
GPS usage (load flight plan in GPS).

4. Discuss Items

I4101
High/Low chart symbology, lost communication procedures, emergency engine shutdown, abort, and procedure turn approaches.

I4102
Special use airspace, engine failure immediately after takeoff, engine failure during flight, and missed approach/climbout procedures.

I4103
Immediate airstart (PMU NORM), uncommanded propeller feather, and departure procedure versus radar vectors.

I4104
Base ops planning (AP-1, NOTAMs, weather minimums for takeoff, approach, alternate), CTAF usage, and ejection.

I4105
Any EP, Class A operations, TCN, use of FSS/PMSV (in-flight change of flight plan, activate flight plans, and update weather).

5. Block MIF

CTS REF	MANEUVER	I4105
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	3+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+
34	Enroute Procedures	4+
35	Point-to-Point	3+
36	Arcing	4+
37	Holding (VOR)	3+
38	Holding (GPS)	3+
39	VOR Approach	3+

MIF continued on next page.

CTS REF	MANEUVER	I4105
40	GPS Approach	3+
41	Localizer Approach	3
42	ILS Approach	3+
43	Circling Approach	3+
44	RA/GCA	3+
45	Missed Approach	3+
46	Instrument Turnpoint Procedures	3+
	Special Syllabus Requirements	1

Blk #	Media	Title	Events	Hrs	H/X
I42	T-6A	Instrument Navigation 1 Check Ride	1	2.0	2.0

1. Prerequisites

a. I4105.

b. C4201.

2. Syllabus Notes

a. A minimum of two approaches shall be performed.

b. Students shall prepare and have available a DD-175 and flight log for both primary and alternate routes.

3. Special Syllabus Requirements. None.

4. Discuss Items. Divert, any emergency procedure, and any instrument navigation procedure.

5. Block MIF

CTS REF	MANEUVER	I4290
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	3+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+
34	Enroute Procedures	4+
35	Point-to-Point	3+
36	Arcing	4
37	Holding (VOR)	3
38	Holding (GPS)	3
39	VOR Approach	3
40	GPS Approach	3
41	Localizer Approach	3
42	ILS Approach	3
43	Circling Approach	3
44	RA/GCA	3
45	Missed Approach	3+
46	Instrument Turnpoint Procedures	3+

Blk #	Media	Title	Events	Hrs	H/X
I32	UTD/OFT	Instrument Navigation 2	2	3.0	1.5

1. Prerequisites

a Completion of Primary 1 and selection for Carrier Aviation.

b. F4102 (Conditional prerequisite - required only if FORM stage was started first).

2. Syllabus Notes

a. Build on and practice instrument navigation enroute procedures and instrument approach procedures.

b. Students shall prepare and have available a DD-175 and flight log for each event.

c. Scenarios stress real-world situations.

3. Special Syllabus Requirements. None.

4. Discuss Items

I3201
Departure procedures, STARs, and any EP.

I3202
GPS procedures, any EP, and any instrument procedure.

5. Block MIF

CTS REF	MANEUVER	I3202
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	4+
6	Mission Planning	4+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+
34	Enroute Procedures	4+
35	Point-to-Point	3+
36	Arcing	4
37	Holding (VOR)	4
38	Holding (GPS)	3+
39	VOR Approach	4
40	GPS Approach	3+
41	Localizer Approach	4
42	ILS Approach	3+
43	Circling Approach	4
44	RA/GCA	4+
45	Missed Approach	4+
46	Instrument Turnpoint Procedures	4+

Blk #	Media	Title	Events	Hrs	H/X
I43	T-6A	Instrument Navigation 2	4	8.0	2.0

1. Prerequisite. I3202.

2. Syllabus Notes

a. Flights should be flown as out-and-in or cross-country events to the maximum extent possible.

b. Students shall prepare and have available a DD-175 and flight log for both primary and alternate routes on each event.

3. Special Syllabus Requirements. None.

4. Discuss Items

I4301
OPNAVINST 3710.7U takeoff minimums, OPNAVINST 3710.7U fuel requirements, any EP, and any limitation.

I4302
OPNAVINST 3710.7U alternate requirements, position reports, any EP, and any limitation.

I4303
Operations away from home field, approach lighting systems, any EP, and any limitation.

I4304
Icing, descent planning, any instruction procedure, any EP, and any limitation.

5. Block MIF

CTS REF	MANEUVER	I4304
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	4+
4	BAR	4+
5	Brief/Debrief	4+
6	Mission Planning	4+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	4+
33	In-Flight Briefings	4+
34	Enroute Procedures	4+
35	Point-to-Point	4+
36	Arcing	4
37	Holding (VOR)	4
38	Holding (GPS)	4+
39	VOR Approach	4
40	GPS Approach	4+
41	Localizer Approach	4+
42	ILS Approach	4+
43	Circling Approach	4
44	RA/GCA	4+
45	Missed Approach	4+
46	Instrument Turnpoint Procedures	4+

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Chapter VI

Navigation Training

1. Seating. Students shall occupy the rear seat for all events in the stage. Instructors shall occupy the front seat. Instructors shall carry a current VFR sectional chart.

2. Matrices. The following matrix is an overview of the entire Navigation Stage. The purpose of this matrix is to provide the student and IP the easiest way to track progress, regression, and overall status in relation to the MIF. In addition, there is a single matrix following each block description throughout this chapter.

3. Stage MIF

Simulator/Device Event
Check Ride Event

VNAV/PA STAGE MANEUVER ITEM FILE				
CTS REF	**MANEUVER**	**N3102**	**N4103**	**N4290**
1	General Knowledge/Procedures	4+	4+	4+
2	Emergency Procedures	4+	4+	4+
3	Headwork/Situational Awareness	3+	3+	3+
4	BAR	4+	4+	4+
5	Brief/Debrief	3+	4+	4+
6	Mission Planning	3+	4+	4+
7	NFO Responsibilities	4+	4+	4+
8	Ground Procedures	3+	4+	4+
9	Radio Procedures	3+	3+	3+
11	Departure	3+	4+	4+
12	In-Flight Checks	3+	4+	4+

MIF continued on next page.

VNAV/PA STAGE MANEUVER ITEM FILE				
CTS REF	**MANEUVER**	**N3102**	**N4103**	**N4290**
15	Visual Scan/Lookout Doctrine	3	4+	4+
16	SUA/VNAV Route Entry/Exit Procedures	3+	3+	3+
28	Course Rules	4	4	4
29	PA/AGSM	3	3+	3+
30	Use of ATIS/PMSV/FSS	4+	4+	4+
31	In-Flight Computations	4+	4+	4+
32	CRM/Crew Coordination	3+	4+	4+
39	VOR Approach	3	3	3
40	GPS Approach	3	3	3
41	Localizer Approach	3	3	3
42	ILS Approach	3	3	3
43	Circling Approach	3	3	3
44	RA/GCA	3	3	3
45	Missed Approach	3	3	3
47	VNAV Chart	3+	4+	4+
48	Turnpoint Identification	3+	4+	4+
49	VNAV Turnpoint Procedures	3+	4+	4+
50	Checkpoint Utilization/Correlation	3+	4+	4+
51	Hazard Calls	3+	4+	4+
52	Course Analysis/Corrections	3+	3+	3+
53	Timing Analysis/Speed Corrections	3+	3+	3+
54	Altitude Selection/Compliance	3+	4+	4+
55	Fuel Management/Analysis	3+	4+	4+
56	Wind Analysis/Compensation		3+	3+
57	Target Acquisition	3+	4+	4+

Blk #	Media	Title	Events	Hrs	H/X
N31	OFT	Visual Navigation (VNAV)/ Precision Aerobatics (PA)	2	3.0	1.5

1. Prerequisites

   a. N1104 (Chart Prep Time).

   b. N1109 and N1110 (Visual Navigation SS).

2. Syllabus Notes

   a. VFR event in the T-6A Operational Flight Trainer.

   b. Plan to arrive at target with a precise ETA.

   c. Students will not use radio NAVAIDs or GPS while on the route.

3. Special Syllabus Requirements. None.

4. Discuss Items

   N3101
   Ensure SNFO understands Course Training Standards, simulator wind analysis limitations, event OFT configuration settings, time and course corrections, turnpoint procedures, fix-correct-assess process, and 6-minute rule.

   N3102
   Same discuss items as N3101 (above), terrain clearance tasks, mission tasks and differences in IFR/VFR clearances.

5. Block MIF

CTS Ref	MANEUVER	N3102
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+

MIF continued on next page.

CTS Ref	MANEUVER	N3102
5	Brief/Debrief	3+
6	Mission Planning	3+
7	NFO Responsibilities	4+
8	Ground Procedures	3+
9	Radio Procedures	3+
11	Departure	3+
12	In-Flight Checks	3+
15	Visual Scan/Lookout Doctrine	3
16	SUA/VNAV Route Entry/Exit Procedures	3+
28	Course Rules	4
29	PA/AGSM	3
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
39	VOR Approach	3
40	GPS Approach	3
41	Localizer Approach	3
42	ILS Approach	3
43	Circling Approach	3
44	RA/GCA	3
45	Missed Approach	3
47	VNAV Chart	3+
48	Turnpoint Identification	3+
49	VNAV Turnpoint Procedures	3+
50	Checkpoint Utilization/Correlation	3+
51	Hazard Calls	3+
52	Course Analysis/Corrections	3+
53	Timing Analysis/Speed Corrections	3+
54	Altitude Selection/Compliance	3+
55	Fuel Management/Analysis	3+
57	Target Acquisition	3+

Blk #	Media	Title	Events	Hrs	H/X
N41	T-6A	VNAV/PA	3	6.0	2.0

1. Prerequisite. N3102.

2. Syllabus Notes

a. VFR on squadron approved VNAV routes.

b. Plan to arrive at target with a precise ETA.

c. Students will not use radio NAVAIDs or GPS while on the route.

d. In order to grade PA on any single syllabus event, three of the following maneuvers shall be executed in flight: aileron roll, wingover, barrel roll, loop, half-Cuban eight, Immelmann, and split-S.

e. To the maximum extent possible, PA should be graded on each flight in-block.

f. A minimum of three instrument approaches shall be accomplished in-block.

3. Special Syllabus Requirements. None.

4. Discuss Items

N4101
VFR chart interpretation/symbology, emergency field selection, airspace classification (Class A, B, C, D, E, G), wind analysis/compensation, Area 1 utilization, AGSM, precision aerobatics, and any EP.

N4102
Navigation from home field to Pt A, Area 2F transit procedures, lost aircraft procedures, VFR flight following, IFR pickup, low-level emergency procedures, low-level ejection, bird strike, and wind analysis/compensation.

N4103
Off-station operations and maintenance, VFR lost communications (FIH), VFR minimums/cloud clearances, fuel minimums (SOP versus OPNAVINST 3710.7U), VFR field entry/departure, and any EP.

5. Block MIF

CTS Ref	MANEUVER	N4103
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	4+
6	Mission Planning	4+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
15	Visual Scan/Lookout Doctrine	4+
16	SUA/VNAV Route Entry/Exit Procedures	3+
28	Course Rules	4
29	PA/AGSM	3+
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	4+
39	VOR Approach	3
40	GPS Approach	3
41	Localizer Approach	3
42	ILS Approach	3
43	Circling Approach	3

MIF continued on next page.

CTS Ref	MANEUVER	N4103
44	RA/GCA	3
45	Missed Approach	3
47	VNAV Chart	4+
48	Turnpoint Identification	4+
49	VNAV Turnpoint Procedures	4+
50	Checkpoint Utilization/Correlation	4+
51	Hazard Calls	4+
52	Course Analysis/Corrections	3+
53	Timing Analysis/Speed Corrections	3+
54	Altitude Selection/Compliance	4+
55	Fuel Management/Analysis	4+
56	Wind Analysis/Compensation	3+
57	Target Acquisition	4+

Blk #	Media	Title	Events	Hrs	H/X
N42	T-6A	VNAV/PA Check Ride	1	2.0	2.0

1. Prerequisite. N4103.

2. Syllabus Notes

a. VFR on squadron approved VNAV routes.

b. Plan to arrive at target with a precise ETA.

c. Students will not use radio NAVAIDs or GPS while on the route.

d. A minimum of one instrument approach shall be accomplished on this check ride.

3. Special Syllabus Requirements. None.

4. Discuss Items. Any EP, any system, and any VNAV procedure.

5. Block MIF

CTS Ref	MANEUVER	N4290
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	4+
6	Mission Planning	4+
7	NFO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+

MIF continued on next page.

CTS Ref	MANEUVER	N4290
15	Visual Scan/Lookout Doctrine	4+
16	SUA/VNAV Route Entry/Exit Procedures	3+
28	Course Rules	4
29	PA/AGSM	3+
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	4+
39	VOR Approach	3
40	GPS Approach	3
41	Localizer Approach	3
42	ILS Approach	3
43	Circling Approach	3
44	RA/GCA	3
45	Missed Approach	3
47	VNAV Chart	4+
48	Turnpoint Identification	4+
49	VNAV Turnpoint Procedures	4+
50	Checkpoint Utilization/Correlation	4+
51	Hazard Calls	4+
52	Course Analysis/Corrections	3+
53	Timing Analysis/Speed Corrections	3+
54	Altitude Selection/Compliance	4+
55	Fuel Management/Analysis	4+
56	Wind Analysis/Compensation	3+
57	Target Acquisition	4+

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Chapter VII

Formation Training

1. Seating. Student shall occupy the rear cockpit during this stage.

2. Matrices. The following matrix is an overview of the entire Section Fundamentals Stage. The purpose of this matrix is to provide the student and IP the easiest way to track progress, regression, and overall status in relation to the MIF. In addition, there is a single matrix following each block description throughout this chapter.

3. Stage MIF

Simulator/Device Event

SECTION FUNDAMENTALS STAGE MANEUVER ITEM FILE			
CTS REF	**MANEUVER**	**F3101**	**F4102**
1	General Knowledge/Procedures	3+	3+
2	Emergency Procedures	3+	3+
3	Headwork/Situational Awareness	3+	3+
4	BAR	4+	4+
5	Brief/Debrief	3+	3+
6	Mission Planning	3+	3+
7	NFO Responsibilities	3+	3+
8	Ground Procedures	3+	3+
9	Radio Procedures	3+	3+
11	Departure	3+	4+
12	In-Flight Checks	3+	4+
15	Visual Scan/Lookout Doctrine	3	4+
17	In-Flight Planning/Area Orientation	3	3+

MIF continued on next page.

SECTION FUNDAMENTALS STAGE MANEUVER ITEM FILE			
CTS REF	**MANEUVER**	**F3101**	**F4102**
28	Course Rules	4	4
30	Use of ATIS/PMSV/FSS	4+	4+
32	CRM/Crew Coordination	3+	3+
33	In-Flight Briefings	3+	3+
58	Taxi and Marshal	3+	3+
59	Formation Takeoff		3+
60	Wingman Communication	3+	3+
61	Section Management/Flight Leadership		3+
62	Section Fuel Management	4+	4+
63	VOR/Geographic Rendezvous	3+	3
64	Parade Position	3+	3+
65	Breakup and Rendezvous	3+	3+
66	Underrun	3+	3+
67	Lead Change		3+
68	Lost Sight	3+	3+
69	Cruise Position	3+	3+
70	Tail-Chase	3+	3+
71	Tactical Formation/Maneuvering	3+	3+
72	Rejoin	3+	3+
73	Section Break		3+
74	Section Approach		3+

Blk #	Media	Title	Events	Hrs	H/X
F31	OFT	Section Fundamentals	1	1.5	1.5

1. Prerequisites

a. F1108 (Section Fundamentals Cockpit Familiarization Study).

b. F1109 (Section Fundamentals Event Rehearsal Study).

2. Syllabus Notes. None.

3. Special Syllabus Requirements. None.

4. Discuss Item. Lead/wing responsibilities, section radio procedures, section maneuvering and positions, hand signals, prop form area procedures (confines of R-2908 VFR), VOR/ geographic rendezvous, aborted takeoff, midair collision, NORDO, HEFOE visual signals, down aircraft procedures, lost sight, and blind.

5. Block MIF

CTS REF	MANEUVER	F3101
1	General Knowledge/Procedures	3+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	NFO Responsibilities	3+
8	Ground Procedures	3+
9	Radio Procedures	3+
11	Departure	3+
12	In-Flight Checks	3+

MIF continued on next page.

CTS REF	MANEUVER	F3101
15	Visual Scan/Lookout Doctrine	3
17	In-Flight Planning/Area Orientation	3
28	Course Rules	4
30	Use of ATIS/PMSV/FSS	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	3+
58	Taxi and Marshal	3+
60	Wingman Communication	3+
62	Section Fuel Management	4+
63	VOR/Geographic Rendezvous	3+
64	Parade Position	3+
65	Breakup and Rendezvous	3+
66	Underrun	3+
68	Lost Sight	3+
69	Cruise Position	3+
70	Tail-Chase	3+
71	Tactical Formation/Maneuvering	3+
72	Rejoin	3+

Blk #	Media	Title	Events	Hrs	H/X
F41	T-6A	Section Fundamentals	2	3.0	1.5

1. Prerequisite. F3101.

2. Syllabus Notes

a. Students shall conduct the brief and debrief for both flights in block.

b. To the maximum extent possible, the parade sequence should be accomplished on F4101 and tactical formation/ maneuvering should be accomplished on F4102.

c. A minimum of two section approaches shall be accomplished in block to include each student executing at least one approach from lead position and at least one approach from wing position.

3. Special Syllabus Requirements. None.

4. Discuss Items

F4101
Parade sequence and section emergency procedures.

F4102
Tactical formation procedures and section emergency procedures.

5. Block MIF

CTS REF	MANEUVER	F4102
1	General Knowledge/Procedures	3+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	BAR	4+
5	Brief/Debrief	3+
6	Mission Planning	3+

MIF continued on next page.

CTS REF	MANEUVER	F4102
7	NFO Responsibilities	3+
8	Ground Procedures	3+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
15	Visual Scan/Lookout Doctrine	4+
17	In-Flight Planning/Area Orientation	3+
28	Course Rules	4
30	Use of ATIS/PMSV/FSS	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	3+
58	Taxi and Marshal	3+
59	Formation Takeoff	3+
60	Wingman Communication	3+
61	Section Management/Flight Leadership	3+
62	Section Fuel Management	4+
63	VOR/Geographic Rendezvous	3
64	Parade Position	3+
65	Breakup and Rendezvous	3+
66	Underrun	3+
67	Lead Change	3+
68	Lost Sight	3+
69	Cruise Position	3+
70	Tail-Chase	3+
71	Tactical Formation/Maneuvering	3+
72	Rejoin	3+
73	Section Break	3+
74	Section Approach	3+

Chapter VIII

Tactical Training

This chapter does not apply to the NFOTS Primary 1 and Primary 2 phases of NFO training.

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Chapter IX

Course Training Standards

1. Purpose. These standards outline the tasks and proficiency required of SNFOs during the Primary 1 and Primary 2 phases.

2. Student Duties and Responsibilities

a. Plan the mission.

b. Ensure the aircraft is preflighted, inspected, and equipped for the assigned mission.

c. Operate the aircraft to accomplish the mission using sound judgment and airmanship.

3. General Standards

a. Achieve training standards for VMC maneuvers in conjunction with visual clearing.

b. Unless otherwise specified, use BAR standards for all items with altitude, airspeed or heading parameters.

c. "Standard" equates to ***good*** (G/4).

d. Momentary deviations outside CTS that do not compromise flight safety are acceptable if subsequent corrections are timely.

e. Procedural knowledge and application must comply with applicable directives and allow efficient mission accomplishment. If individual tasks require pre-mission planning, the standards from ***Mission Planning*** apply.

4. Execution. The MIF regulates student progression to meet required standards prior to phase completion. Instructor pilots shall evaluate student performance against these standards.

5. Job Tasks. Specific performance and standards required are described as follows:

BEHAVIOR STATEMENT	STANDARDS
Graded Item	
• A brief description of the behavior, required action, and/or conditions.	• The specific standards for the action. May be read as "The SNFO…"

6. Graded Items. The MIF for specific graded items varies for each stage. Several items are graded on all complete syllabus events. The standards for these universally graded items are listed first.

7. Course Training Standards

BEHAVIOR STATEMENT	STANDARDS
1. General Knowledge/Procedures	
• Maintain working knowledge of all appropriate flight training instructions and directives.	• Recites, discusses, and/or performs all applicable items essential to the operation of the aircraft and completion of the mission with minimal deficiencies not pertaining to safety of flight.
2. Emergency Procedures	
• Perform critical action emergency procedures. • Maintain in-depth knowledge of all NATOPS emergency procedures. • Utilize the Pocket Checklist IAW NATOPS and FTI guidelines.	• Correctly analyzes situation given real or hypothetical scenarios. • Recites critical action steps from memory without error (100 percent boldface accuracy). • Is proficient with all information contained in the PCL, is able to utilize the checklist in a correct and timely manner.

BEHAVIOR STATEMENT	STANDARDS
3. Headwork/Situational Awareness	
• Comply with the FTI, SOP, and NATOPS while maintaining situational awareness commensurate with safety-of-flight and mission objectives.	• Has knowledge of all rules and regulations and carries out all duties with minimum supervision. • Foresees and avoids possible difficulties by making recommendations that enhance the situation and/or overall mission effectiveness. • Remains alert and oriented during all phases of the event. • Maintains overall awareness with regard to fuel state, aircraft configuration, traffic in vicinity of own ship, and dynamic weather conditions.
4. Basic Airwork Recognition (BAR)	
• Monitor/direct aircraft control and perform an instrument/composite scan as appropriate to maintain planned navigation parameters, ATC clearances and assigned altitude, airspeed, and heading during flight.	• Recognizes airwork deviations in a timely manner based on the phase of flight, not to exceed 30 seconds (enroute phase) and effectively directs corrections to: ▶ Maintain aircraft within 100 feet, 10 KIAS, ±5° of assigned altitudes, speeds, and headings, respectively. ▶ Initiate/direct level-off from all climbs/descents.

BEHAVIOR STATEMENT	STANDARDS
5. Brief/Debrief	
• Prepared for the brief and, as required, brief the flight in preparation for the mission. • During debrief, recall flight progression and play an active role in the mission/aircrew evaluation.	• Briefs the flight in accordance with the squadron briefing guide for the event. • Demonstrates proficient knowledge of discuss items with minimal deficiencies. • Demonstrates knowledge of all aspects related to conduct of flight event. • Recalls specifics of the mission and is able to accurately assess aircrew performance.
6. Mission Planning	
• Perform mission planning to include takeoff, climb, enroute, descent, approach, and landing data. • Prepare chart and mission material. • Obtain applicable weather, bird activity, and NOTAMs. • Plan alternate execution. • Prepare flight log/DD-175, as required. • Adjust mission's profile based on real-world/weather concerns.	• Correctly interprets a valid Wx briefing/information for all flights. • Completes DD-175 with 100 percent accuracy. • Completes Jet Log with 90 percent accuracy, as required. • Reviews FLIP documents, NOTAMs, and other applicable flight information. • Has all required materials (Wx brief, FLIP publications, NOTAMs) prior to brief. • Accurately adjusts mission profile based on current and forecast weather.

BEHAVIOR STATEMENT	STANDARDS
7. NFO Responsibilities	
• Accomplish required in-flight duties.	• Performs appropriate in-flight checklists, when required, per NATOPS and FTI. • Gives proper takeoff calls, altitude warning calls and landing rollout calls per FTI to 90 percent accuracy.
8. Ground Procedures	
• Begins when departing for the aircraft and ends when cleared for takeoff. • Begins again when aircraft clears the runway and ends when Before Leaving Aircraft Checklist is complete.	• Correctly performs aircraft inspections, and all ground checklists, procedures, and required briefs IAW NATOPS, FTI, and SOPs. • Monitors engine instruments for proper indications during start. • Safely directs/monitors the taxi of the aircraft via local procedures, using applicable airfield diagram as a reference.
9. Radio Procedures	
• Effectively communicate via the use of UHF/VHF radios and ICS as required. • Use standard terminology IAW AIM/FAR and FTIs.	• Understands and responds to 90 percent of incoming calls. • Communicates clearly and concisely with appropriate agencies using standard military and FAA terminology.

BEHAVIOR STATEMENT	STANDARDS
10. Takeoff	
• Begins when cleared for takeoff and ends when After Takeoff Checklist complete and climb power and airspeed are established.	• Performs/directs takeoff procedures IAW NATOPS, FTI, and SOP. ► Ensures MAX power is set. ► Ensures computed MIN power at 60 KIAS is met. ► Ensures rotation is initiated at 85 KIAS. ► Ensures proper takeoff attitude is met. • Monitors engine instruments and annunciator panel and reports abnormalities. • Ensures gear retraction after verifying two positive rates of climb and flap retraction after verifying a minimum of 110 KIAS and prior to exceeding aircraft limitations.
11. Departure	
• Begins when climb airspeed is established and ends when published departure is complete or established in assigned working area. • If no published departure, ends when initiating pitch change for level-off.	• Directs compliance with ATC/departure/flight plan clearances. • Performs an operations check after making radio contact with Departure Control, safety of flight permitting.
12. In-Flight Checks	
• Accomplish in-flight checks IAW NATOPS, FTI, and SOP.	• Identifies nearest divert field. • Perform operations check at least every 20 minutes.

BEHAVIOR STATEMENT	STANDARDS
13. Use of Controls/Trim	
• Properly trim the aircraft as required by changes in airspeed, power, or configuration.	• Attempts to maintain balanced flight and trims in the correct sequence: rudder, elevator, and aileron.
14. Basic Transitions	
• Performs/directs/ ensures proper climbs, descents, and level-offs.	• Initiates level-off at the correct altitude IAW FTI, using PAT principle. • Performs clearing turns for climbs and descents greater than 1000 feet, as appropriate.
15. Visual Scan/Lookout Doctrine	
• Maintain lookout doctrine essential for safe ground/airborne operations. • Direct aircraft control and effective visual navigation, relying primarily on outside references. • Keep visual scan outside the cockpit to the maximum extent practicable for safe aircraft operation, traffic, terrain hazards and hazard/ weather avoidance.	• Directs aircraft maneuvers to safely avoid actual or potential conflicts. • Alerts crew to ground/airborne hazards (i.e., traffic, weather, birds, and obstacles). • Locates visual checkpoints to aid effective and safe navigation.

BEHAVIOR STATEMENT	STANDARDS
16. SUA/VNAV Route Entry/Exit Procedures	
• Perform entry/exit procedures for SUA or VNAV route IAW FTI, briefing, and local standards. • Properly use visual cues and navigational aids to identify the route or SUA entry/exit point. • Use descent procedures (planned or unplanned) to control timing to the entry point.	• Performs required duties during entry and exit from SUA or VNAV route. • Contacts airspace control authority and uses appropriate comms to gain clearance to enter/exit controlled airspace. • Acquires and flies to the entry point, using offsets as necessary to start the route on the desired outbound heading. • For restricted area operations, contacts range authority for entry/exit clearance and uses appropriate comms IAW FTI and local standards. • Directs adherence to published or directed entry/exit restrictions with respect to altitude (to include VFR hemispheric altitudes), heading, airspeed, position, squawk, etc. • Arrives at the entry point ±4 minutes of briefed time.
17. In-Flight Planning/Area Orientation	
• Visually navigate and remain in the confines of designated MTR, MOA, or working area/SUA. • Remain within the MTR vertical/lateral confines as prescribed in the AP/1B.	• Maintains appropriate boundaries and altitude block within a working area as required. • Remains aware of aircraft position in designated working area. • Directs headings and plans maneuvers to keep aircraft in the confines of the designated working area.

BEHAVIOR STATEMENT	STANDARDS
18. Level Speed Change	
• Perform/direct level speed change procedures.	• Executes/directs the level speed change procedures in a timely manner IAW the FTI with 100 percent accuracy. • Commences in normal cruise configuration on any numbered heading. • Completes the Before Landing Checklist during the maneuver. • Makes appropriate BAR calls whether at the controls or not.
19. Turn Pattern	
• Perform/direct turn pattern procedures.	• Executes/directs turn pattern procedures IAW the FTI with 100 percent accuracy. • Commences in normal cruise or slow cruise on a cardinal heading. • Makes appropriate BAR calls to include maintaining bank angle ±10° whether at the controls or not.
20. Power-Off Stall	
• Perform/direct power-off stall procedures.	• Performs/directs power-off stall procedures IAW the FTI with 100 percent accuracy. • Commences in normal cruise configuration. • Establishes aircraft in proper 125 KIAS, power-off glide attitude. • Makes appropriate BAR calls whether at the controls or not. • Initiates/directs recovery at first indication of an impending stall.

BEHAVIOR STATEMENT	STANDARDS
21. Approach Turn Stall	
• Perform/direct ATS procedures.	• Performs/directs ATS procedures IAW the FTI with 100 percent accuracy. • Commences in the downwind configuration. • Completes the Before Landing Checklist during the maneuver. • Initiates/directs recovery at first indication of stall at/above 6000 feet AGL. • Verifies positive climb and reports, "aircraft climbing."
22. Spin	
• Perform/direct spin procedures.	• Performs/directs spin procedures IAW the FTI with 100 percent accuracy. • Commences in slow cruise configuration. • Clearly communicates correct spin indications over ICS. • Initiates/directs/verifies proper recovery procedures after verifying stabilized spin indications or reaching 12,500 feet AGL (whichever occurs first).

BEHAVIOR STATEMENT	STANDARDS
23. Simulated Power Loss	
• Perform/direct simulated engine failure procedures, given simulated power loss indications above 3000 feet AGL.	• Performs/directs simulated power loss procedures IAW the FTI with 100 percent accuracy. • Immediately recognizes the power loss and verbalizes all required boldface procedures for the given situation with 100 percent accuracy. • Selects suitable landing site, if available. • Effectively navigates the aircraft to intercept ELP. • Ensures proper glide speeds +10/-5 KIAS.
24. Practice Precautionary Emergency Landing	
• Given simulated condition requiring PEL, perform/direct PPEL procedures.	• Performs/directs PPEL procedures IAW the FTI with 100 percent accuracy. • Immediately recognizes the emergency condition and verbalizes all required boldface procedures for the given situation with 100 percent accuracy. • Selects and effectively navigates to the nearest suitable landing site. • Manages/monitors airspeed as appropriate for climb or acceleration to high key. • Ensures 125 +10/-5 KIAS prior to configuration. • Ensures clean configuration for climb, configures at appropriate time for landing, and completes the Before Landing Checklist prior to touchdown.

BEHAVIOR STATEMENT	STANDARDS
25. Landing Pattern	
• Perform/direct landing pattern procedures and BAW/BAR. • If from initial, from rolling out on downwind to flare. • If from takeoff, touch-and-go, or waveoff, commencing the crosswind turn to flare.	• BAR/BAW: ► Maximum 45° AOB. ► TO Flap: ▪ 115 +10/-0 KIAS from 180 until final. ▪ 105 +10/-0 KIAS until beginning landing flare. ► LDG Flap: ▪ 110 +10/-0 KIAS from 180 until final. ▪ 100 +10/-0 KIAS until beginning landing flare. ► No-Flap: ▪ 120 +10/-0 KIAS from 180 until final. ▪ 110 +10/-0 KIAS until beginning landing flare.
• Contacts tower for landing and downwind clearance or broadcasts intentions on CTAF.	• Tower/CTAF landing communications are initiated at the abeam position IAW FTI format without error. • Crosswind request/CTAF report made IAW FTI without IP prompting.
• Directs/configures/ trims aircraft for landing.	• By the abeam position, pattern airspeed +10/-0 KIAS.
• Completes the landing checklist.	• If turning downwind, landing checklist complete prior to the abeam position without error. If out of the break, landing checklist complete prior to landing without error.

BEHAVIOR STATEMENT	STANDARDS
26. Landings	
• Perform/direct normal landing per the FTI. • From crossing runway threshold until touch-and-go, commencing crosswind turn.	• Performs/directs safe landing procedures IAW NATOPS, FTI, and local procedures. • Attempts/directs: correct glidepath until flare initiation. • Attempts/directs touchdown with: ► Appropriate crosswind controls. ► Main gear first (nose-high attitude). ► Nose gear ±10 feet of centerline. • Recognizes the touchdown zone as defined by FTI and local instructions. • Performs/directs full-stop or touch-and-go procedures per FTI. • Makes landing rollout calls until aircraft reaches 40 KIAS, as appropriate (This is not required in the Contact phase).
27. Go Around/Waveoff	
• When appropriate, discontinue approach to landing.	• Initiates/directs waveoff when required by the FTI and/or safety-of-flight to include: ► Conflicting with PEL traffic. ► Stall warning system actuates (stick shaker) or airframe buffet. ► Aircraft requires more than 45-degree AOB to avoid overshooting final. • Ensures positive climb and configuration during waveoff.
28. Course Rules	
• Return to home field in accordance with local procedures.	• Obtains ATIS information. • Conducts recovery briefing. • Visually navigates via published routing with minimal discrepancies.

BEHAVIOR STATEMENT	STANDARDS
29. Precision Aerobatics/Anti-G Straining Maneuver	
• Recall in-flight PA maneuver entry parameters. • Perform proper AGSM.	• Directs the setup configuration (proper airspeed and altitude) to begin the maneuver IAW FTI with 100 percent accuracy. • Executes AGSM in flight without error.
30. Use of ATIS/PMSV/FSS	
• Use ATIS/PMSV to update destination conditions IAW the FTI. • Use FSS as required to open, change, and close flight plans.	• Checks ATIS prior to contacting destination approach control. • Updates destination and alternate weather with PMSV/AWOS/FSS enroute, when required. • Contacts FSS to: ► Open flight plans after departure. ► Change flight plans enroute. ► Close flight plans after landing.
31. In-Flight Computations	
• Compute IAW the FTI: ► Ground speed. ► ETE (to turnpoints). ► Fuel at destination IAF.	• Computes: ► Ground speed ±12 knots. ► ETA ±1 minute. ► Fuel at destination IAF within ±30 pounds of instructor calculations.
32. Crew Resource Management/Crew Coordination	
• Use available crew and cockpit resources to minimize workload and enhance situational awareness. • Effectively communicate mission essential information between crewmembers. • Build crew awareness with timely and effective descriptive comm.	• Properly identifies crew roles, responsibilities, and expectations. • Improves mission effectiveness by minimizing crew preventable errors and optimizing crew coordination. • Demonstrates both leadership and team member skills. • Demonstrates proper level of assertiveness for the situation.

BEHAVIOR STATEMENT	STANDARDS
33. In-Flight Briefings	
• Accomplish in-flight briefings IAW the FTI.	• Provides takeoff brief, departure brief, holding brief, field brief, DRAFT report (as required), approach brief, and missed approach/climbout instructions when required using format delineated in the FTI with 90 percent accuracy.
34. Enroute Procedures	
• Perform procedures while flying between departure transition point and destination. • Identify an intersection using appropriate NAVAID(s). • Identify station/ waypoint passage IAW FTI. • Intercept a radial and track inbound or outbound from a station. • Properly manipulate EFIS Control Panel.	• Maintains positional awareness using ground references, navigational aids, VFR charts, or FLIP publications. • Determines approximate wind direction ±30° and ±15 knots and maintains proper crab angle ±5°. • Gives position reports as required. • Leads turns when applicable IAW FTI. • Maintain within 2 NM of course centerline between all NAVAIDs and fixes. • Correctly identifies NAVAID station, GPS waypoint, or intersection passage.
35. Point-to-Point	
• Proceed direct to an assigned fix using PTP procedures.	• Expeditiously directs an initial heading ±30° to the fix. • Continuously updates heading to: ► Avoid large (>20°) heading changes within two minutes prior. ► Arrive within 2 NM of desired point.

BEHAVIOR STATEMENT	STANDARDS
36. Arcing	
• Direct per FTI: ▶ VOR/DME arcing. ▶ Arc-to-radial intercepts. ▶ Radial-to-arc intercepts.	• Maintains the arc ±0.5 DME. • Calculates lead points IAW FTI to join: ▶ Arc ±0.5 DME. ▶ Radial ±3°.
37. Holding (VOR)	
• Direct VOR holding IAW the FTI.	• Computes proper entry turn. • Directs holding airspeed three minutes or less from the holding fix. • Establishes and maintains aircraft within holding airspace. • Properly calculates and applies drift corrections IAW the FTI. • Properly calculates and applies timing corrections IAW the FTI.
38. Holding (GPS)	
• Direct GPS holding IAW the FTI.	• Properly sets GPS for holding. • Computes proper entry turn. • Directs holding airspeed three minutes or less from the holding fix. • Establishes and maintains aircraft within holding airspace. • Properly calculates and applies drift corrections IAW the FTI.

BEHAVIOR STATEMENT	STANDARDS
39. VOR Approach	
• Direct an approach IAW the FTI.	• IAF to FAF maintains course ±1 dot or valid intercept. • Properly directs the pilot to slow and take basic approach configuration IAW the FTI. • By the FAF (when depicted) or initiating descent to MDA, completes landing checklist. • Final: ▶ Maintains ±1 dot of desired course. ▶ Reaches and maintains MDA +100/-0 feet. • Properly calculates and applies backup timing at the FAF. • Properly identifies VDP when published. • Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/MAP. • Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.

BEHAVIOR STATEMENT	STANDARDS
40. GPS Approach	
• Direct a GPS approach IAW the FTI.	• IAF to FAF maintains course ±1 dot or valid intercept. • Initial approach waypoint to FAWP: maintains course ±0.25 NM or valid intercept. • At 3 NM from FAWP, ensures FAWP is active waypoint. • At 2 NM from FAWP, ensures GPS is in active mode. • By the FAF: ▶ Completes landing checklist. ▶ Ensures approach goes active prior to descent from FAF. • Final: ▶ Maintains ±1 dot of desired course. ▶ Reaches and maintains MDA +100/-0 feet. • Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/MAP. • Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.

BEHAVIOR STATEMENT	STANDARDS
41. Localizer Approach	
• Direct a localizer approach IAW the FTI.	• By the FAF or initiating descent to MDA, completes landing checklist. • Final: ▶ Maintains ±1 dot of desired course localizer. ▶ Reaches and maintains MDA +100/-0 feet. ▶ Begins backup timing at the FAF when applicable. • Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/MAP. • Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.
42. ILS Approach	
• Direct the approach IAW the FTI.	• Prior to initiating descent to DA, completes landing checklist. • Final: ▶ Maintains ±1 dot of localizer course. ▶ Maintains ±1 dot on glideslope. ▶ Begins backup timing for the localizer approach when applicable. ▶ Ensures missed approach/ climbout instructions briefed prior to the DA. • Determines if the aircraft is in a position to execute a safe landing upon reaching the DA. • Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.

BEHAVIOR STATEMENT	STANDARDS
43. Circling Approach	
• Direct a circling maneuver to the landing runway IAW the FTI.	• Provides the pilot proper instructions to establish the aircraft into the circling maneuver for the landing runway. • Selects appropriate MDA for aircraft category. • Ensures aircraft is within obstruction clearance radius for aircraft category before commencing circling maneuver. • Directs the pilot as needed to execute the appropriate missed approach or climbout instructions. • Maintains airspeed +10/-0 KIAS of circling airspeed. • Maintains altitude at circling minimums -0 feet.
44. Radar Approach/Ground-Controlled Approach	
• Direct the pilot, as needed, to properly comply with the FTI parameters of a PAR or ASR approach.	• Responds quickly and correctly to controller instructions. • Ensures lost communication and missed approach/climbout instructions are received prior to starting descent to DA or MDA. • By glideslope intercept or descent to the MDA, completes landing checklist. • Determines if the aircraft is in a position to execute a safe landing upon reaching the DA or MDA/MAP. • Directs the pilot as needed to execute the appropriate missed approach or climbout instructions. • Maintains airspeed +5/-0 KIAS on final. • Maintains heading ±3°.

BEHAVIOR STATEMENT	STANDARDS
45. Missed Approach	
● Direct a missed approach per the FTI.	● Directs appropriate missed approach procedure when field not in sight and, ► Nonprecision: ▪ Inside FAF and full-scale CDI deflection. ▪ At specified MAP DME. ▪ At expiration of timing in the absence of DME. ► Precision, first of: ▪ DA. ▪ Controller-directed. ► Or, not in position for safe landing.
46. Instrument Turnpoint Procedures	
● Perform instrument turnpoint calls.	● Makes appropriate two-minutes-prior, mark-on-top, and wings-level calls using proper format and terminology IAW FTI with 80 percent accuracy. ● Gives a wind-corrected outbound heading for a course, when able. ● Updates navigation aids appropriately.

BEHAVIOR STATEMENT	STANDARDS
47. VNAV Chart	
• Prepare a visual navigation chart. • Demonstrate chart/route knowledge.	• Prepares a visual navigation chart, given a route and a TPC, to an accuracy of ±15 pounds (fuel), ±30 seconds overall and ±20 seconds at each turnpoint (time), and ±2° plotting (course) without error. • Ensures all CHUM present and correct, chart signed, and all airspace, diverts/conflicting airfields and applicable hazards annotated on chart. • Briefs to IP: turnpoint description, features inside TP circle, hazards on route, and all altitude changes.
48. Turnpoint Identification	
• Identify turnpoints on a visual route.	• Identifies visual turnpoints IAW FTI to an accuracy of 67 percent.
49. VNAV Turnpoint Procedures	
• Perform VNAV turnpoint calls.	• Makes appropriate VNAV two-minutes-prior, mark-on-top, and wings-level calls using proper format and terminology with 80 percent accuracy.
50. Checkpoint Utilization/Correlation	
• Identify/use visual intermediate checkpoints to determine aircraft position. • Use visually distinct terrain features as aids to navigation. • Maintain SA and position on flight planned route as required.	• Identifies intermediate checkpoints to an accuracy of 50 percent. • Uses terrain and selected cultural/noncultural features to aid visual navigation so as to maintain position accuracy within 2 NM. • Maintains positional awareness during route of flight using clock-chart-ground correlation.

BEHAVIOR STATEMENT	STANDARDS
51. Hazard Calls	
• Perform hazard calls IAW FTI. • Inputs and monitors traffic advisory frequency for hazard airfields.	• Calls 90 percent of known hazards using proper format and terminology. • Clears aircraft of weather, birds, hazards, obstacles, and other aircraft. • Inputs traffic advisory frequencies for all hazard airfields along VNAV route. • Provides timely descriptive or directive hazard calls as situation dictates.
52. Course Analysis/Corrections	
• Determine aircraft position in relation to intended course. • Perform standard course corrections to correct back to the specified course line IAW FTI. • Navigate on a specified visual route using dead reckoning/visual cues to correct back to planned course.	• Correlates visual references with aircraft position to an accuracy of 1 NM. • Timely and accurately applies 80 percent of course corrections IAW FTI. • Directs appropriate heading change to return to course ±2° of IP calculations.

BEHAVIOR STATEMENT	STANDARDS
53. Timing Analysis/Speed Corrections	
• Plan and execute the mission to hit the route entry point at briefed real-world time. • Plan and execute to arrive at the target at preflight planned TOT. • Perform standard speed corrections to arrive at the target on time IAW FTI.	• Directs arrival at route entry point to ±4 minutes of scheduled entry time. • Gives a time hack during brief. • Timely and accurately implements 80 percent of speed corrections in the correct magnitude, time, and direction. • Calculates and initiates timing corrections to within ±5 knots and ±6 seconds of IP calculations. • Arrives at the target within ±1 minute from preflight real-world time on target.
54. Altitude Selection/Compliance	
• Select the proper altitude to and from visual route. • Maintain route altitude IAW FTI.	• Ensures aircraft maintains VFR hemispheric altitudes. • Directs climbs two minutes prior to the turnpoint.
55. Fuel Management/Analysis	
• Maintain fuel awareness throughout flight. • Determine fuel state and any fuel consumption trends. • Calculate Joker/Bingo/ MCF. • Monitor fuel state and direct deviations, if needed, to accomplish mission goals and land with adequate fuel reserves IAW OPNAVINST 3710.7U and SOP.	• Checks fuel state at least every 20 minutes. • Calculates Joker/Bingo/MCF IAW FTI ±30 pounds. • Compares fuel state to MCF at each turnpoint and correctly states any trends in fuel consumption. • Makes recommendations to mission execution based on fuel state to ensure OPNAVINST 3710.7U/TW-6/ Squadron requirements for MCF.

BEHAVIOR STATEMENT	STANDARDS
56. Wind Analysis/Compensation	
• Determine wind direction and magnitude using course trend and time analysis. • Correctly compensate for current wind condition on each leg.	• Determines approximate wind direction ±30° and ±10 knots and maintains proper crab angle ±5°. • Correctly applies crab and airspeed compensations for headwinds and crosswinds to 80 percent accuracy.
57. Target Acquisition	
• Acquire and fly to the target.	• Uses target environment's visual cues to correctly correlate and identify the target. • Directs the pilot, IAW FTI, to mark on top to an accuracy of ±1/2 NM.
58. Taxi and Marshal	
• Perform taxi and marshal flight.	• Performs IAW FTI. • Lead monitors wingman's position.
59. Formation Takeoff	
• Perform section or interval takeoff.	• Performs IAW FTI. • Lead: ▶ Monitors wingman. ▶ Directs appropriate type of takeoff for weather/runway conditions. • Wing: Advises IP of airspeeds, fuel, engine, and gear status.
60. Wingman Communication	
• Safely and effectively communicate with wingman using radio/ visual/aircraft.	• Correctly uses and interprets hand signals. • Performs IAW FTI to 90 percent accuracy.

BEHAVIOR STATEMENT	STANDARDS
61. Section Management/Flight Leadership	
• Plan and execute a parade/tacform sequence of maneuvers. • Understand current and required position. • Accomplishes/directs ADMIN/TAC ADMIN tasks in a timely manner.	• Lead ▶ Maintains section inside the confines of assigned working area. ▶ Efficiently sequences and directs maneuvers. ▶ Adjusts mission profile for external factors (weather, traffic, etc.).
62. Section Fuel Management	
• Monitor fuel status for section to allow for safety of flight and mission accomplishment.	• Lead: ▶ Conducts fuel checks as required by FTI or every 20 minutes. ▶ Ensures that flight is completed IAW SOP/NATOPS/FTI fuel requirements. • Lead/wing: Recognizes and calls JOKER/BINGO fuel as necessary with 100 percent accuracy.
63. VOR/Geographic Rendezvous	
• Join up to parade position while lead is maintaining constant heading or in constant AOB turn at a VOR fix or over a ground reference point.	• Recalls procedures with 100 percent accuracy IAW FTI. • Effectively navigates to the prebriefed rendezvous point. • Visually acquires the lead aircraft. • Continuously monitors join-up and advises IP of deviations. • Directs underrun procedures as necessary.
64. Parade Position	
• Identify and maintain proper position.	• Recognizes parameters IAW FTI: ▶ Lower UHF antenna on pitot tube. ▶ Near pitot tube on prop arc. • Ensures correct position for IFR/VFR turns.

BEHAVIOR STATEMENT	STANDARDS
65. Breakup and Rendezvous	
• Conduct breakup and rendezvous IAW FTI.	• Recalls procedures IAW FTI with 100 percent accuracy. • Calls out airspeeds during rendezvous. • Continuously monitors join-up and advises IP of deviations. • Directs underrun procedures as necessary.
66. Underrun	
• Recognize/direct underrun as necessary for safety of flight or training.	• Recognizes the need to underrun. • Recalls/directs procedures IAW FTI with 100 percent accuracy.
67. Lead Change	
• Execute an expeditious and safe lead change IAW FTI.	• Considers airspace and weather in planning maneuvers. • Performs IAW FTI.
68. Lost Sight	
• Execute simulated lost wingman procedures IAW FTI.	• Wing: Immediately directs IP to execute procedures. • Executes procedures with 100 percent accuracy IAW the FTI.
69. Cruise Position	
• Identify and maintain proper position.	• Ensures aircraft maintains position IAW FTI: ▶ Within 60° bearing cone. ▶ 1- to 3-plane widths. ▶ 20 feet of stepdown. • Ensures aircraft is within range to receive visual signals.

BEHAVIOR STATEMENT	STANDARDS
70. Tail-Chase	
• Execute tail-chase profile IAW FTI.	• Advises IP of wingman's position and status. • Advises IP of aircraft parameters including airspeed, altitude, and Gs. • Attempts to maintain sight of wingman throughout maneuver. • Clears for the section. • Calls altitudes IAW FTI when within 1500 feet of airspace boundary. • Lead: ► Ensures section G-warm complete prior to tail-chase maneuvering. ► Directs flight to remain within assigned area.
71. Tactical Formation/Maneuvering	
• Engaging turns used to maneuver a section when in combat spread.	• Lead: ► Conducts section G-warm prior to tactical maneuvering. ► Maintains area/route orientation. ► Clears flight path. ► Checks six-o'clock position. • Wingman directs appropriate position/geometry (combat spread, in-place turns, cross turns, etc.) IAW FTI. ► Ensures deconfliction from Lead. ► Checks six o'clock position.

BEHAVIOR STATEMENT	STANDARDS
72. Rejoin	
• Reform to parade while lead is maintaining constant heading or in constant AOB turn.	• Recalls procedures with 100 percent accuracy IAW FTI. • Calls out airspeeds during rendezvous. • Continuously monitors join-up and advises IP of deviations. • Directs underrun procedures as necessary.
73. Section Break	
• Conduct VFR recovery and break (3-sec or fan break).	• Performs/directs recovery and break IAW FTI, Course Rules, FAR/AIM, and NATOPS.
74. Section Approach	
• Execute an instrument or visual straight-in approach as lead or wingman.	• Recalls procedures with 100 percent accuracy IAW FTI. • Lead: ▶ Maintains contact or instrument parameters and procedures. ▶ Utilizes wingman consideration. • Wingman performs IAW FTI.

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Chapter X

Master Materials List

Individually Issued Materials

NOMENCLATURE	IDENTIFICATION	QTY PER STUDENT
1. Academic Programmed Instructional Units	CNAT P	10
2. Flight Training Instructions	CNAT P	6
3. T-6A NATOPS Flight Manual	NAVAIR A1-T6A AAA-NFM-100	1
4. T-6A NATOPS Pocket Checklist	NAVAIR 01-T6A AAA-NPCL-100	1
5. NATOPS Instrument Flight Manual		1
6. DOD FLIP Publications		
a. Low Altitude Enroute Charts		3
b. IFR Enroute Supplement		1
c. Low Altitude Instrument Approach Procedures		2
d. High Altitude Instrument Approach Procedures		1
7. Military Flight Plan	DD-175	4
8. Weather Briefing Form	DD-175-1	20
9. Flight Crew Checklist		16

NOMENCLATURE	IDENTIFICATION	QTY PER STUDENT
10. Supporting Materials		
a. Navigation/ Landing Aid (2B47)	Instrument Training	6
b. T-6A Aircraft Cockpit	Familiarization Training	6

Aircraft and Major Training Devices

1. T-6A Aircraft.

2. Cockpit Procedures Trainer quantity controlled by Naval Air Warfare Center Training Systems Division (NAVAIRWARCENTRASYSDIV), Training Material Management Division, Inventory Control Branch (Code 5204).

3. Operational Flight Trainer quantity controlled by NAVAIRWARCENTRASYSDIV, Training Material Management Division, Inventory Control Branch (Code 5204). Cost listed in NAVAIRWARCENTRASYSDIV Directory of Naval Training Devices Cognizance Symbol 2"0".